DEVELOPING A PATIENT-DRIVEN, SUBSTANTIVE DEFINITION OF OFFICE-BASED OPIOID TREATMENT SUCCESS

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Abstract

Patients in office-based opioid treatments' definitions of treatment success and recovery are not well understood. This is important because traditional ways of defining and measuring success focus on consumption, and usually abstinence. This definition does not encompass medication-assisted treatment, such as office-based opioid treatment, which do not necessitate abstinence. Moreover, there is evidence to support the efficacy of office-based opioid treatment in reducing the harm associated with opioid misuse, which is important as opioid misuse has increased and leads to serious consequences for individuals, families, and society.

To address this gap in the literature, using a qualitative design, this dissertation explored patients' ideas on defining office-based opioid treatment success, recovery, facilitators and barriers to treatment success, and recommendations for measuring success. This was achieved by conducting a focus group with seven participants and subsequent interviews with seven participants, two of whom were also in the focus group, for a total of 12 office-based opioid treatment patients in rural Alaska. Grounded theory, directed content analysis, and a community-based participatory research approach were used to collect and analyze focus group and interview data.

Findings suggest that patients' definitions of office-based opioid treatment success extend beyond consumption and include four main themes: functioning, such as contributing to society and living a functional lifestyle; accomplishing, such as reappraising life goals and having an intrinsic belief that one can accomplish success; relationships, such as family, friendships, and restoring relationships; and psychological factors, such as emotional wellbeing and addiction. Recovery was understood as a construct that was related to success, yet distinct, and involved healing and growth, a process, and a recovery attitude. Facilitators and barriers to treatment

success include treatment factors, contextual factors, and psychological factors. Participants also recommended measuring success in a way that is individualized and flexible.

This study suggests that providers should take a multifaceted and patient-driven approach when attempting to define and measure office-based opioid treatment success. Specifically, findings suggest that patients experience success in office-based opioid treatment in ways that extend beyond substance consumption. Findings also suggest that contextual barriers, such as availability and accessibility of treatment, should be addressed on a systemic level.

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Preface

Like most dissertation undertakings, this project was spawned from a place of passion and personal meaning. Through my work as a practicum student and Suboxone® Program Director at Turning Point Counseling Services, I was touched by many tragic stories from patients. They shared how their lives were negatively impacted by the lack of available or sufficient treatment resources for opioid addiction. They shared how they had encountered stigma and experienced shame when attempting to seek treatment by those within the very system that were supposed to be helping them. They shared powerful stories about perseverance, strength, tenacity, and compassion from others that helped them to get the treatment they needed.

These stories prompted me to conduct a mixed-methods research project aimed at understanding the factors associated with the use and underutilization of treatment for opioid addiction in Alaska by examining the attitudes, perspectives, and knowledge of those who would benefit from medication-assisted treatment and of those who deliver services to individuals with opioid addiction. From participant's sharing in this study along with community interpretation of the data by the Alaska Advisory Board on Alcohol and Drug Addiction, a need for understanding patient's experiences of success emerged as a relevant future direction. This dissertation is the continuation of that study. It is dedicated to the individuals and communities negatively impacted by inadequate treatment for opioid addiction.

Along the way, many individuals and groups played integral roles in my ability to explore and share this very meaningful work. First, the members of my dissertation committee displayed dedication and unwavering commitment to helping me grow as a researcher and to helping me make a contribution to informing the direction of office-based opioid treatment in Alaska. I especially thank Dr. Ellen Lopez for her support, mentorship, and guidance with

methodology and Dr. Vivian Gonzalez for providing her expert perspective in the addictions literature.

Second, my community partners were essential to the completion of this project. Mr. Gunnar Ebbesson and Ms. Cici Schoenberger share the vision I have for increasing access to quality services for opioid addiction in the state of Alaska. Mr. Ebbesson supported my vision and connected me with individuals and groups that played a role in this project. He continues to help me discriminate the work I have done in a way that facilitates its application. Ms. Schoenberger was a pleasure to collaborate with and served an integral role in each step of this project. She is similarly passionate about increasing access to quality services and is dedicated to the wellbeing of her patients. I look forward to continued collaboration with these two in the future.

Third, this project was graciously funded by the Alaska Mental Health Trust Authority. Other individuals that donated their time and perspective include: Gabriel Cartagena, who worked with me on the focus group data collection and analysis; Keri Boyd, Kyle Dexter, and Jessica McKay, who helped me pilot the demographics survey and focus group procedures; and Mariah Henderson, who donated her graphic design skills to construct a beautiful visual representation of the data.

Fourth, my friends, family, and colleagues were vital supports and emotional containers for the ups and downs that transgressed during this process. I am endlessly grateful for my cohort members and program friends Danielle Giroux, Samantha Bacon, and Keri Boyd, my parents including Al and Kathy Hewell, and Chris and the late Nancy Ayotte, and my incredibly supportive husband Jared Lundgren.

Finally, this project is dedicated to the research participants who inspired this study and who shared so boldly, along with the patient's who struggle with opioid addiction only to encounter barriers quality treatment. My sincerest goal is that this work will inspire change that improves treatment for each of you, and those who have not been able to access treatment. I hope what you have shared about office-based opioid treatment success will reach those who are involved in service delivery in a way that illuminates the successes that can be experienced in this treatment, and in a way that evokes meaningful change.

Chapter 1: Introduction

Within the field of substance abuse, there are varied views on how success in treatment should be defined and measured (Betty Ford Institute Consensus Panel, 2007; Butler Center for Research, 2011; Witkiewitz, 2013). Some schools of thought equate success to abstinence, while others, specifically the illicit drug abuse literature, view success in terms of a reduction of harm and/or a reduction in illicit drug use (Laudet, 2008; MacMaster, 2004). Some treatment options, including medication-assisted treatments (defined on p. 4), by definition do not coincide with the mainstay assumption that abstinence, the self-denial from **all** substances, is the desired outcome for everyone in treatment (Harm Reduction Coalition [HRC], 2015; Thomas et al., 2014). Instead of a predetermined, either-or approach based on the providers' preferences, treatment should concentrate on the patient's goals, needs, and readiness to change when determining if interventions should emphasize a reduction of consumption and the harm associated with use, or complete abstinence (MacMaster, 2004).

In addition to inconsistent definitions of treatment success within the substance abuse treatment field, little is known regarding patients' views of what constitutes treatment success. It is important to understand the patients' view of success because their treatment priorities, goals, motivation, and sense of control all play important roles in treatment outcomes, such as retention, treatment attendance and engagement, negative urinalysis, reduced urges to use, and post-treatment abstinence (Brown & Miller, 1993; Cox, Klinger, & Fadardi, 2015; Miller & Miller, 2009; Shamloo & Cox, 2014; Zeldman, Ryan, & Fiscella, 2004), as well as other functioning, such as employment (Hser, Polinsky, Maglione, & Anglin, 1999). Thus patient perspectives are critical considerations for successful treatment implementation. Moreover,

patients' views may differ from what is emphasized in standard outcome measures, such as substance use and time in treatment (Reisinger, Bush, Colom, Agar, & Batjes, 2003).

This study aimed to build a patient-driven definition of success by qualitatively exploring patient-identified aspects of successful treatment among individuals with an opioid use disorder who were in an office-based opioid treatment (OBOT) program. OBOT programs use the Food and Drug Administration approved pharmaceutical treatments for opioid dependence, buprenorphine and the buprenorphine-naloxone combination, Suboxone® in an office-based setting as opposed to a structured and regulated medication clinic. It is important to understand how OBOT patients understand success because, being approved in 2002, this is a fairly new treatment approach in the United States that may deviate from mainstay assumptions about treatment success.

Because this study focuses on an opioid-specific treatment, this chapter will provide a brief overview of the current prevalence of opioid use in the United States and medication-assisted treatment for opioid use disorders. Then, controversies in defining and measuring substance misuse treatment success and the current gaps in knowledge regarding patient perspectives on these matters will be discussed. Finally, a brief overview of the purpose and methodology of this study will be outlined.

Background

Opioid use. Opioid misuse has been deemed a national epidemic due to the recent growth in the incidences of opioid initiation (Paulozzi et al., 2012; Substance Abuse and Mental Health Services Administration [SAMSHA], 2011) and the harm associated with opioid misuse (SAMHSA, 2013a), including prescription drug addiction and overdose (American Society of Addiction Medicine [ASAM], 2016; Bagalman, Sacco, Thaul, & Yeh, 2014; United States

Department of Health and Human Services [HHS], 2013). In 2010, nearly 5,500 new individuals in the United States began using prescription opioids analgesics (painkillers) each day for nonmedical reasons, such as experimentation or for recreation (SAMHSA, 2011). Between 2004 and 2011, emergency medical services associated with opioid use increased by 183% (SAMSHA, 2013a). Between 1999 and 2010, there was a fourfold increase in death rates caused by prescription opioids overdose (Jones, Mack, & Paulozzi, 2013). As of 2012, the average number of annual deaths from prescription opioids in the United States was 17,000 (Bagalman et al., 2014).

The sudden increase in prescription opioid abuse also appears to be causing an upsurge in the rates of heroin use and abuse. Incidences of heroin initiation are 19 times higher in people who have previously used prescription opioids for nonmedical purposes (Muhuri, Gfroerer, & Davies, 2013), leading many experts to believe that heroin initiation is often precipitated by prescription opioid analgesic use (Bagalman et al., 2014; Muhuri et al., 2013). Between 2006 and 2013, first time heroin use for people in the United States ages 12 and older nearly doubled, increasing from 90,000 to 169,000 (SAMHSA, 2013b). Moreover, heroin-related deaths have increased significantly in recent years (Rudd et al., 2014).

In Alaska, drug overdose rates, the majority of which include prescription drugs, increased by 55% between 1999 and 2010 (Trust for America's Health, 2013). Notably, the two largest ethnic groups in Alaska, Alaska Native/American Indian and non-Hispanic White people, have higher death rates from opioids compared with other ethnic groups (Rinaldo & Rinaldo, 2013). Furthermore, 34% of Alaskan citizens live in rural areas (United States Census Bureau, 2012a), and the literature suggests that higher rates of prescription drug overdose occur in rural

and impoverished counties (Rinaldo & Rinaldo, 2013). These findings suggest that Alaskans in particular are at risk for opioid misuse and the harms associated with it.

To add to this concern, a substantial number of individuals need substance use disorder treatment, but they are not receiving it. In 2008-2012, the majority (89.5%) of Alaskan citizens who experienced illicit substance use disorders did not receive treatment (SAMHSA, 2013c). This is comparable to national rates, which suggest that only 1% of Americans receive substance use treatment, while 8.6% of Americans need treatment (National Institute on Drug Abuse [NIDA], 2015). The treatment gap and the growing rates of opioid-related problems demonstrate the need for effective and accessible treatment for Alaskans who are experiencing problems related to opioid misuse.

Medication-assisted treatment. Medication-assisted treatment options combine pharmacotherapy to treat the physiological symptoms of addiction and behavioral therapy to treat the behavioral symptoms associated with addiction (Thomas et al., 2014). In 2002, the Food and Drug Administration approved a new medication-assisted treatment for opioid use disorders: buprenorphine. Buprenorphine and the buprenorphine and naloxone combination, Suboxone®, have been established to be effective, safe, and well-tolerated pharmaceutical treatments for opioid dependence (ASAM, 2013; Davids & Gastpar, 2004). They increase patient engagement and retention in treatment while reducing symptoms (e.g., cravings, withdrawal, consumption) associated with opioid use disorders (ASAM, 2013; Kraus et al., 2011; Rieckmann, Daley, Fuller, Thomas, & McCarty, 2007). Because this treatment approach uses a partial opioid agonist to treat opioid addiction, some do not consider it an abstinence-based approach (Thomas et al., 2014). The general goal of buprenorphine maintenance treatment is to facilitate either a reduction or cessation of illicit opioid use (Thomas et al., 2014).

Defining and Measuring Success

Defining success and recovery. Measuring substance abuse treatment success is challenging due to a disagreement on what constitutes success (Butler Center for Research, 2011; McLellan, Chalk, & Bartlett, 2007), which is at least partly informed by the model of addiction being ascribed to by different treatment approaches. Additionally, the terms success and recovery are frequently entwined, leading to inconsistent and incomprehensive measurement of either term.

Recovery is often used as a term synonymous with being in a state of remission or partial remission from an addictive disorder across multiple domains of functioning. Individuals are not necessarily being "cured" or recovered (past tense) from the given disorder, but are rather in a constant process of recovery given the need to actively maintain this status (McLellan et al., 2007; White, 2007). Because recovery, which typically (although not always) requires abstinence, tends to be emphasized in 12-step communities and in many treatment approaches, it is important to understand how individuals in non-abstinence based treatments, such as OBOT, define both success and recovery.

Identifying attributes of success. Many approaches to defining success and measuring treatment outcomes emphasize substance consumption, specifically abstinence (Butler Center for Research, 2011; McLellan et al., 2007; Miller & Miller, 2009; Tiffany, Friedman, Greenfield, Hasin, & Jackson, 2012; Witkiewitz, 2013). However, there are numerous other categories of factors (e.g., biological, psychological, sociocultural) that impact, and are impacted by, the development, maintenance, and treatment of addictions. It is argued that improvement across multiple domains of functioning, not simply abstinence, is the goal for many individuals in substance use treatment and thus should be a consideration for treatment evaluation (McLellan et

al., 2007). Furthermore, a narrow focus on consumption does not accommodate the goals of all patients or treatment approaches, nor does it take into account individual variability in use patterns. Therefore, it is also important to understand the multifaceted components that are important to patients as outcomes in their treatment beyond consumption.

Evaluating success. Finally, there are established controversies and challenges to identifying the outcome domains (i.e., attributes that change as a result of treatment) for evaluating substance misuse treatment, particularly when moving beyond consumption. These should be chosen based on the setting (e.g., abstinence-only or harm-reduction programs), relevancy, and the purpose of evaluation (e.g., clinical, program evaluation, research, societal; Carroll et al., 2014; Donovan et al., 2011; Tiffany et al., 2012). In addition to these considerations, non-consumption related outcomes might be selected based on sensitivity to change due to intervention (Carroll et al., 2014; Tiffany et al., 2012), relationship to consumption outcomes over time (Carroll et al., 2014), availability of psychometrically sound measures, association with addictive drug use, and generalizability to most substances and users (Tiffany et al., 2012). Although some experts have established guidelines for determining outcome domains, it remains important to understand and be open to what patients believe should be evaluated, given that their goals and motivations have a compelling force in treatment outcomes.

Patient-Driven Definition of Success

This study uniquely contributes to the literature by exploring an area that has been neglected in substance abuse research; specifically, defining successful OBOT from the patient's perspective. Illuminating the patients' definitions of success may help clinicians, evaluators, and researchers to operationally define and concretely measure patient-defined success in OBOT, rather than relying on abstinence-based definitions of success that have little applicability to the

goals and intended use of this treatment approach. It may also assist health service providers in deciding how to intervene with opioid use disorder patients to further improve treatment engagement and retention. Although patient-identified outcomes in harm-reduction programs have been explored (Lee & Zerai, 2010), successful treatment, the term recovery, and how these should be measured according to the patients remain unknown for OBOT.

Study Aims and Research Questions

This study aimed to expand the current understanding of success in substance use treatment by developing a patient-driven definition of OBOT success. In collaboration with one OBOT program in rural Alaska, this qualitative study was conducted in the following three phases:

- Phase I: A focus group with seven active patients was conducted to establish an initial framework for OBOT success
- Phase II: Follow-up interviews with seven active patients to refine the initial framework were conducted using theoretical sampling techniques
- Phase III: A findings sharing forum was held to share, verify, and further refine findings from Phases I and II.

This study adhered to the principles of Community Based Participatory Research (CBPR), which is a strengths-based and empowerment approach that engages participants in data analysis, interpretation, and dissemination of findings (Israel, Schulz, Parker, & Becker, 1998, 2001; Kemmis & McTaggart, 2005). Accordingly, the research questions informing the study aims included the following:

1) How do OBOT patients define recovery?

2) How do OBOT patients define OBOT success?

3) What facilitators and barriers do these patients identify as relating to their definition of OBOT success?

4) What factors do these patients identify as important for measuring OBOT success?

Finally, for clarity and ease of reference, acronyms used throughout this dissertation are included in Table 1.1 below. Four acronyms are referenced in the document, and the rest are referenced in the in-text citations.

Table 1.1
List of Acronyms

Acronym	Meaning
APA	American Psychiatric Association
ASAM	American Society of Addictions Medicine
CBPR*	Community-based Participatory Research
CDC	Centers for Disease Control and Prevention
HIV*	Human Immunodeficiency Virus
HRC	Harm Reduction Coalition
MHALA	Mental Health America Los Angeles
NA	Narcotics Anonymous
NIDA	National Institute on Drug Abuse
OBOT*	Office-based Opioid Treatment
SUD*	Substance Use Disorder
SAMHSA	Substance Abuse and Mental Health Service Administration
VHA	Veterans Health Administration

*Frequently referenced throughout the text.

Chapter 2: Literature Review

Given the need to expand the established understanding of success in Office-based Opioid Treatment OBOT, this chapter will review relevant background that informs this dissertation including opioid misuse and treatment (Section A) and defining and measuring success (Section B). The first section will cover opioid misuse and treatment options with attention to what opioids are, models that inform substance use treatment, substance use treatment (including medication-assisted treatment). Then methadone and buprenorphine will be reviewed, including the history, recommended uses, and efficacy of each.

Section A: Opioid Misuse and Treatment

Opioids, Opioid Use, and Opioid Misuse

Opioids. Opioid agonists (chemicals that bind to neuron receptors) can be plant derived (e.g., morphine and codeine), semisynthetic (e.g., heroin and oxycodone), or synthetic (e.g., fentanyl, methadone, meperidine; Renner, Knapp, Ciraulo, & Epstein, 2014). These substances activate the mu opioid neurotransmitter receptor site, which is involved in pain perception and reward (NIDA, 2014; Renner et al., 2014), while rare opioid analgesics, like butorphanol, also stimulate the kappa opioid neurotransmitter receptor site, which is involved in pain, mood, motor control, and consciousness (NIDA, 2014; Renner et al., 2014).

Effects of opioid use. The pharmacological effects of opioids can be sorted into three categories: opioid intoxication, opioid withdrawal, and health effects such as opioid overdose. Opioid intoxication has a progression of effects, including euphoria, apathy, and an initial burst of energy. This is followed by psychomotor retardation, quiescent arousal in a clouded "twilight-like state", a sense of warmth and heaviness, constriction of the pupils, dry mouth, hypoactive

bowels, retarded respiration, slurred speech, and impaired judgment/concentration (Dilts & Dilts, 2005; NIDA, 2014; Renner et al., 2014).

Prolonged use also may produce changes in a "dose dependent response" which leads to physical dependence, whereby withdrawal symptoms are precipitated by the cessation or reduction in opioid use (SAMHSA, 2004). Withdrawal symptoms are opposite the symptoms of acute opioid agonist use and may include craving, restlessness, cold flashes, kicking of the extremities, insomnia, diarrhea, vomiting, and pain (NIDA, 2014). An individual experiencing opioid withdrawal will follow three overlapping stages. The first stage peaks 36-72 hours after the last dose and involves craving, yawning, sweating, and a runny nose. The second stage occurs within 12-72 hours after the last dose and involves sleep disturbance, dilated pupils, appetite loss, irritability, and tremors. The third stage occurs within 24-72 hours after the last dose and involves an increased severity of the aforementioned symptoms including violent yawns, muscle cramps, severe insomnia, chills and fever, nausea, vomiting, and diarrhea (Dilts & Dilts, 2005).

In addition to withdrawal, prolonged use of opioid agonists may create tolerance, particularly to the effects of euphoria, requiring increasing doses to achieve the desired effects of acute intoxication (Renner et al., 2014). Tolerance, dependence, and withdrawal, encompass short-term consequences of opioid use. Consequences of long-term use may include deterioration in decision-making, behavioral regulation skills, and the ability to adaptively respond to stress (NIDA, 2014).

Other consequences of opioid use include negative health effects such as an increased risk for contracting infectious diseases like human immunodeficiency virus (HIV) and hepatitis and for abscesses with intravenous administration. Further health consequences that can occur,

regardless of route of administration, include breathing complications, liver disease, kidney disease, and risk of overdose (NIDA, 2014). Moreover, opioid use disorders are associated with high mortality rates due to infection, suicide, homicide, and accidental overdose (Renner et al., 2014). One study found that those addicted to opioids experienced premature mortality due to factors like injury and disease at rates of approximately six times the rate of the general population (Smyth, Hoffman, Fan, & Hser, 2007). Signs of overdose include cardiovascular collapse, convulsions, pinpoint pupils, pale skin, apnea, and coma (Dilts & Dilts, 2005). Additionally, a serious adverse effect from opioid use is respiratory depression, which is the most common effect leading to death from opioids in hospital settings (Jungquist, Karan, & Perlis, 2011).

History of opioid use. Opium has been used for medicinal and recreational purposes throughout history dating back to the early Greek and Roman eras (Julien, Advokat, & Comaty, 2011). The use of opioids further materialized in the 1800s when morphine was derived from opium to treat pain (Julien et al., 2011). During the Civil War era and with the creation of the hypodermic needle, intravenous use of opioids became more common (Julien et al., 2011). In the early 20th century, European immigrants, particularly young, troubled, "street criminal" males, typified the average user (Courtwright, 2001). With the changing demographic of the typical person who misused opioids, the stigma associated with the lower-class immigrants became associated with opioid addiction. This, in part, reinforced the cultural assumption in the United States that opioid addiction is a product of poor moral character (SAMHSA, 2004).

Opioid use disorder. To meet criteria for an opioid use disorder, a patient must meet at least two of the following eleven criteria within a 12-month period (American Psychiatric Association [APA], 2013): (a) taking opioids in larger quantities or for longer durations than

intended; (b) continued use despite desire or attempts to limit or control use; (c) time is consumed with opioid use, seeking, or recovery from proximal side effects; (d) presence of cravings; (e) failure to fulfill duties (including social, occupational, familial) because of opioid use; (f) continued use despite social and interpersonal consequences; (g) other activities are given up because of opioid use; (h) recurrent use of opioids in dangerous situations; (i) use despite known psychological and physical problems caused or exacerbated by use; (j) presence of tolerance; or (k) presence of withdrawal symptoms.

Not everyone who uses opioids as prescribed or recreationally will develop an opioid use disorder. There are many factors that are associated with the development of opioid use disorders including positive reinforcement associated with opioid use (e.g., experiencing pleasure and other positive emotions), negative reinforcement associated with opioid use (e.g., reducing pain, anxiety, boredom, depression, aggression, or withdrawals), social approval for opioid misuse, environmental cues triggering continued use, experiences of craving, psychosocial factors (e.g., availability of opioids and environmental stressors), motivation, drug use expectancies, self-efficacy, and opioid receptor disruption (Renner et al., 2014; Tonigan, 2004). Other factors associated with opioid use disorders include family history and genetic predispositions toward substance use disorders, low self-esteem, familial disruption, alcoholism, nicotine use, antisocial personality disorder, anxiety, mood disorders, and bipolar disorder (Renner et al., 2014; Thombs, 2006). Understanding the etiology and maintaining factors related to opioid use disorders are important for determining appropriate treatment approaches. Although many such factors have been revealed, models of addiction frequently emphasize some factors over others.

Models Informing Treatment Approaches

Moral model. The moral model assumes that addiction is a moral and value-laden condition (Thombs, 2006). It suggests that individuals choose to become addicted to substances because of personality deficits, such as irresponsibility. Proponents of this model include but are not limited to conservative organizations, law enforcement efforts, and fanatical religious groups. As such, "treatment" tends to be punitive, to include legal actions, such as jail. Limitations of this model include one-dimensional postulations about the multifaceted (e.g., biological, social, psychological) factors that influence addiction, the uncertain notion that addiction is a free choice, and the erroneous and unsupported assumption that punishment is an effective form of treatment (Thombs, 2006).

Disease model. The disease model suggests that addiction stems from a biological disposition, such as genetics (Thombs, 2006). This model assumes that individuals with addiction are victims of a disease or illness. Proponents of this approach include the field of medicine, the industries that produce and market substances (e.g., alcohol and tobacco industries) and medications to treat addictions, and the "recovery movement" (e.g., groups of people and their families that are "recovering" from addiction). Treatment tends to be compassionate, intensive, educationally-based, and medically-managed (Thombs, 2006). For instance, if medication-assisted treatment is administered under a disease/medical model, it may be assumed that medication alone is adequate and will not emphasize the importance of psychosocial treatment or support. However, medication-assisted treatment can be administered in a treatment setting that views the medication as a foundation that supports other psychosocial and functional changes (Rabinowitz, 2009).

In the disease model, abstinence is often regarded as a "necessary but not sufficient" component for recovery (McLellan et al., 2007). Therefore, someone using medication-assisted treatment with a disease explanatory model may have abstinence as the underlying goal. Yet not all treatment approaches equate abstinence with improved functioning, and medication-assisted treatment approaches need not be synonymous with the disease/medical models of addiction.

This model has normalized addiction as a form of illness, much like any other, which has reduced the shame associated with addiction. However some of the underlying assumptions, including expectations that abstinence is the only appropriate goal and beliefs that addiction is a progressively worsening condition, have been scientifically invalidated (Thombs, 2006). It should be noted that a combination of the disease-moral models influence many of the treatment approaches currently used in the United States (Thombs, 2006).

Behavioral model. The behavioral model posits that addiction is a maladaptive behavioral disorder that an individual learns (Thombs, 2006). This model maintains an objective and nonjudgmental stance, and suggests that the behavior of addiction can be shaped by one or more factors (e.g., cognition, environment, social circumstances). Psychologists and professionals from other similar fields, such as public health, tend to support this model. Treatment typically involves behavioral modification, such as changing one's environment or learning skills to prevent relapse, and does not necessitate abstinence. It emphasizes strategies that are driven by the evidence of what works, modified according to the evidence, and evaluated empirically. Additionally, treatment may include the use of medication, but tends to be deemphasized as the main focus (Thombs, 2006).

Biopsychosocial model. Whereas the disease model defines opioid use disorders as a disease, primarily emphasizing the biological underpinnings and consequences of the disorder

(ASAM, 2013), the biopsychosocial model considers biological, psychological, cognitive, and sociocultural aspects that lead to and are disrupted by the disorder (Donovan & Marlatt, 2005; Tellioglu, 2010). It recognizes that an individual may develop an addiction due to both individual and environmental factors (Kosten & George, 2002). Treatment tends to be interdisciplinary in nature, recognizing the intricacies of addiction (Donovan & Marlatt, 2005). This treatment model informs OBOT, which should attend to the biopsychosocial factors above and beyond opioid use without imposing the goal of abstinence (Kraus et al., 2011). These different ways of explaining addiction inform how substance use treatment approaches deliver treatment and understand treatment success.

Patient-centered models. In addition to the above explanatory models, there has been a recent emphasis on patient-centered, strengths-based, and individualized approaches to treating chronic conditions, such as substance use (Mental Health America Los Angeles [MHALA], 1995; SAMHSA, 2010a; Veterans Health Administration [VHA], 2011). These systems of healthcare (including the Psychosocial Rehabilitation Model [MHALA, 1995], Recovery-Oriented Systems of Care [SAMHSA, 2010a], and Psychosocial Rehabilitation and Recovery Services [VHA, 2011]) prioritize the patients' goals, values, culture, and community as important elements of treatment and "recovery," and respect patients' abilities to direct their treatment. Moreover, they veer from the medical models' definition of recovery by shifting the focus away from first treating the symptoms of a patient and toward first viewing the patient as the focus of treatment (MHALA, 1995). This is accomplished by listening to the needs and desires of the patient while emphasizing the importance of meeting the patient's functional goals (MHALA, 1995). This approach, coupled with the biopsychosocial explanatory model of addiction, builds the foundation for this dissertation, which seeks to bring to light the patient's

views of success in OBOT. Moreover, this dissertation is patient-centered, strengths-based, empowerment-focused, and respects the rights of individuals to direct their own treatment.

Substance Use Treatment

Most people who need treatment for substance use do not receive it. While it is estimated that 8.6% of Americans need substance use treatment, only 1% of the entire population actually receive it (NIDA, 2015). Between 2008 and 2012, 89.5% of Alaskan citizens ages 12 and older who had illicit substance use disorders did not receive treatment (SAMHSA, 2013c). In general, those who do receive treatment for opioid misuse tend to be dependent for two to three years before seeking treatment (Renner et al., 2014). Overall, the national rates of those seeking treatment for opioid misuse increased between 2002 and 2013, with prescription opioid misuse treatment-seeking increasing from approximately 360,000 in 2002 to 746,000 in 2013 and treatment-seeking associated with heroin increasing from 277,000 in 2002 to 526,000 in 2013 (SAMHSA, 2013b), which is likely related to increases in opioid use disorders during this time period, rather than increased availability of treatment resources.

Reasons for not seeking substance use treatment include no health care coverage, no desire to stop using, not knowing where to receive treatment, belief that treatment was not needed to handle the problem, financial costs (even with health care benefits), transportation issues, and conflict with employment (e.g., difficulty getting needed time off; SAMHSA, 2015). Also, most people with substance use disorders recover spontaneously, or without entering treatment (Renner et al., 2014). Those who spontaneously recover tend to have better social functioning, less psychopathology, and fewer legal problems (Rounsaville & Kleber, 1985). This evidences the important role of resources and motivation for seeking services, and social, psychological, and legal factors for overcoming or managing opioid use disorders.

Evidence-based practices. Since the early 1990s, knowledge related to evidence-based practices and treatments for people with substance use disorders has increased, yet implementation of these practices has lagged (Power, Nishimi, & Kizer, 2005). Seven practices have been recommended as a means to increase evidence-based practices for substance use treatment, including: (a) screening patients in medical, primary care, or mental health settings for substance use concerns; (b) conducting an initial brief intervention with clients who screen positively for substance use concerns; (c) creating a specific treatment plan for those who meets diagnostic criteria for a substance use disorder through the assessment process; (d) using evidence-based psychosocial interventions for clients who receive specialty care, which may include therapies such as motivational enhancement therapy, cognitive-behavioral therapy, structured family/couples therapy, contingency management, community reinforcement therapy, and 12-step programs; (e) considering pharmacotherapy that is directly linked to psychosocial treatment, particularly for individuals with opioid dependence and alcohol disorders; (f) encouraging initial engagement and ongoing retention with consideration for the patient's readiness to change; and (g) collaboratively discussing recovery and chronic care management in treatment (Power et al., 2005). In summary, substance use treatment should take a patient-centered and collaborative approach to screening, intervening, and retaining individuals in a treatment, which should include psychosocial interventions and potentially pharmacotherapy (Power et al., 2005).

Medication-assisted treatment. Medication-assisted treatment comprises pharmacological interventions integrated with counseling, social services, and psychosocial treatment, including behavioral approaches. Medication-assisted treatment has been shown to have the greatest likelihood of success for people with opioid use disorders (SAMHSA, 2005).

Medication-assisted treatment approaches for opioid misuse can involve short-term detoxification, longer-term opioid replacement therapy, and antagonist treatment with naltrexone (Renner, et al., 2014). Medication-assisted treatment can be used in settings like opioid-treatment programs using methadone, or as an OBOT using buprenorphine (e.g., Suboxone® and Subutex®; SAMHSA, 2005). Many proponents of medication-assisted treatment ascribe to principles of harm reduction that recognize "any positive change" as a success (Lee & Zerai, 2010, p. 2411), thereby allowing for a range of individualized strategies to be used, from reduced or managed use to complete abstinence (HRC, 2015). Incidentally, opioid replacement therapy largely holds to a disease model view of addiction.

Historically, there have been challenges preventing the widespread adaptation of medication-assisted treatment, including stigma about patients with opioid use disorders (Gordon et al., 2011) and about medication-assisted treatment (Roose, Fuentes, & Cheema, 2012), lack of education about buprenorphine, and lack of interest in using medication-assisted treatment (Gordon et al., 2011). Despite these challenges, because of medication-assisted treatment's effectiveness in improving treatment outcomes for those with opioid use disorders, the National Institute of Health has called for state and federal leaders to increase the use of medication-assisted treatment through implementing strategies that reduce stigma, decreasing arbitrary regulation, and increasing access to treatment (NIH, 1997). In the next section, methadone and buprenorphine treatments will be discussed separately with an emphasis on their historical context, pharmacological properties, typical treatment structure, and efficacy.

Methadone

Historical context. In 1919, the Supreme Court upheld the Harrison Act, which placed regulations on opioids and other substances. This had implications for the existing treatment

centers that were already dispensing morphine as a means of treating their opioid addicted clientele (SAMHSA, 2005). These programs were shut down by the early 1920s, which led to an increase in illicit opioid-related crime (SAMHSA, 2005). "Narcotic farms," which admitted voluntary and prison inmates for detoxification services using medical, psychological, and social modalities, were instated by 1929 (SAMHSA, 2005). Although these prison-like programs were unsuccessful according to high relapse rates (Duvall, Locke, & Brill, 1963; Hunt & Odoroff, 1962), they did serve as the foundation for new treatment advances, including medication-assisted treatment (White, 1998).

The increased rates of opioid use disorders and the harm associated with opioid use, coupled with research supporting the efficacy of opioid-treatment programs (but not supporting other psychosocial alternatives) led to more support for opioid-treatment programs, such as methadone, during the legislative administrative eras of Kennedy and Nixon (SAMHSA, 2005). Researchers attempted to find opioids with longer half-lives to treat opioid addiction medically, and observed that methadone was effective at reducing opioid cravings and the euphoria associated with opioid use with minimal side effects (Dole, 1988). During the 1970s, there was a public push to support and fund methadone maintenance treatment in opioid-treatment programs settings (SAMHSA, 2005).

Pharmacology. Methadone is a mu opioid agonist that is absorbed orally. It reaches peak concentration approximately four hours after it is administered and has a slow half-life (one to two days), thereby reducing the euphoric effects and abuse potential (Renner et al., 2014). Although adverse reactions are rare, possible side effects of methadone include drowsiness, sedation, endocrine effects (or lowered hormonal levels which may result in lowered libido, sexual dysfunction, decreased energy, depression, and amenorrhea in women), constipation,

nausea, vomiting, sleep-disordered breathing, and respiratory depression (Seewald, 2013; Webster, 2013). The recommended dose of methadone is between 60-120 mgs/day (Centers for Disease Control and Prevention [CDC], 2002). There is evidence to suggest that doses should be individualized, yet higher doses generally produce more efficacious results, such as a decrease in illicit opioid use as measured by positive urinalysis (Strain, Bigelow, Liebson, & Stiler, 1999).

Treatment structure. Effective methadone maintenance treatment should consider individual factors when providing the recommended dose (60-120 mgs/day), retain patients for at least 12 months of treatment, consider co-occurring mental and substance use disorders, and have realistic expectations of the normal day-to-day variations individuals experience in addictions treatment (CDC, 2002). Counseling is often integrated into methadone maintenance treatment. However, two randomized controlled trials found no differences between those in counseling plus methadone compared with those on just methadone alone (Schwartz, Kelly, O'Grady, Gandhi, & Jaffe, 2011, 2012). Despite evidence of methadone being efficacious as a standalone treatment, addictions experts continue to recommend the use of methadone in conjunction with psychosocial treatment, such as counseling, as the standard of care (Renner et al., 2014).

Efficacy. Methadone has demonstrated efficacy in reducing harm and increasing the viability of improved functioning (Rieckmann et al., 2007). One critical assessment of the evidence that reviewed meta-analyses, systematic reviews, and individual studies established methadone maintenance treatment as a highly effective treatment (Fullerton et al., 2014). Methadone has been shown to be effective in improving social functioning, including decreasing drug-related HIV risk behaviors (Fullerton et al., 2014; Gearing & Schweitzer, 1974; Sees et al., 2000; Wilson, Schwartz, O'Grady, & Jaffe, 2010), mortality rates (Fullerton et al., 2014),

criminality (Fullerton et al., 2014; Schwartz et al., 2011), and financial connections related to drugs (i.e., drug-related income and money spent on drugs; Schwartz et al., 2006; Schwartz et al., 2011). People who used methadone on an interim basis were more likely to be admitted into methadone maintenance treatment compared to individuals on a waitlist (Schwartz et al., 2006). Additionally, methadone is also associated with better treatment outcomes, including improved retention (Fullerton et al., 2014; Sees et al., 2000), decreased illicit opioid (Schwartz et al., 2006; Schwartz et al., 2012; Sees et al., 2000) and decreased use of other drug use (Schwartz et al., 2011).

Through decades of research, methadone maintenance treatment has been established as the most effective treatment for opioid dependence (CDC, 2002). However, stigma and other systemic barriers have limited the widespread use of methadone maintenance treatment (SAMHSA, 2005). Moreover, methadone maintenance treatment may not be the preferred form of treatment for all patients. One drawback to methadone maintenance treatment is that it is a Drug Enforcement Agency Schedule III drug that must be dispensed, but not prescribed, at designated opioid treatment programs (O'Connor & Fiellin, 2000; SAMHSA, 2004).

Buprenorphine

Historical context. Another medication used in medication-assisted treatment, buprenorphine, has also demonstrated efficacy in the treatment of opioid misuse. In 2000, a federal law was enacted that, under the Drug Addiction Treatment Act provisions, extended the use of medication-assisted treatment from only opioid-treatment programs (e.g., methadone maintenance treatment) to qualified general medical facilities providing OBOT (SAMHSA, 2004). In 2002, the Food and Drug Administration approved a new medication for opioid-dependence: buprenorphine. Buprenorphine can be prescribed by a general physician who has

taken an 8-hour addictions course and applied for a special waiver, and is classified by the Drug Enforcement Agency as a Schedule III medication. The office-based administration of buprenorphine offers a viable solution to the systemic barrier presented by methadone treatment, namely the regulations requiring methadone use only within specific clinics (Phillips & Preston, 2013).

Buprenorphine has been determined to be comparable to methadone treatment, with few contraindications (Kraus et al., 2011). Contraindications and considerations that may preclude the use of buprenorphine treatment include dependence on sedative-hypnotics (e.g., benzodiazepines) or alcohol, untreated psychiatric or medical conditions, active suicidality or homicidality, multiple treatment attempts and relapses (specifically poor response to buprenorphine), and the physician's lack of competency (SAMHSA, 2004). Those who may be good candidates for buprenorphine treatment have an opioid use disorder, do not have contraindications, are motivated, and are aware of all treatment options (SAMHSA, 2004). More specifically, patients that have demonstrated positive outcomes in buprenorphine treatment include those who are younger and who have shorter opioid abuse histories (Renner et al., 2014).

Pharmacology. Buprenorphine is a partial mu opioid agonist with a high affinity for opioid receptors, meaning that it fully binds with the mu opioid receptor site to deter withdrawal symptoms (by means of its partial agonist properties) and effectively block other agonists (SAMHSA, 2004). It is also a strong kappa opioid receptor agonists (by virtue of its high receptor affinity; Renner et al., 2014; Washington & Fanciullo, 2013) and a nociception agonist (Washington & Fanciullo, 2013).

The various receptor-binding properties at these different sites create the side effect profile, and the analgesic properties (Washington & Fanciullo, 2013). Because buprenorphine is

a partial, not a full, opioid agonist, the side effect profile is milder than that of full agonists with similar side effects including dizziness, headache, constipation, nausea, vomiting, rare respiratory depression (typically when used in conjunction with sedative-hypnotics), precipitation of hypotension, rare cases of allergic reaction, endocrine effects (e.g., lowered libido), and psychiatric effects (e.g., insomnia, fatigue, anxiety, vertigo, and confusion; Washington & Fanciullo, 2013). Moreover, because it only partially agonizes the mu opioid receptor, a ceiling effect occurs by which limited agonal properties occur, even with increased doses (SAMHSA, 2004). Two forms of buprenorphine are available: Subutex® (buprenorphine) and Suboxone® (a combination of buprenorphine and naloxone). Naloxone is an opioid antagonist, meaning it blocks opioid receptors (SAMHSA, 2004) and produces unpleasant precipitated withdrawal when injected.

The general recommended dose for stabilizing patients on buprenorphine is 8-24 mgs/day with the recognition that some patients may need 32 mgs/day (Kraus et al., 2011). Studies have found that 8 mg and 16 mg groups have better retention than 1 mg groups (Ling et al., 1998). An 8 mg dose also outperforms 1 mg groups on global rating (by clients and staff) of drug problems, drug use (based on urine drug screens), and cravings (Ling et al., 1998). Nevertheless, patients should be in opioid withdrawal before being given the first dose of buprenorphine to avoid precipitating withdrawal (Renner et al., 2014; SAMHSA, 2004). Moreover, buprenorphine requires sustained use to reach its full therapeutic benefit (Kraus et al., 2011).

The abuse properties of buprenorphine have been evaluated (Bazazi, Yokell, Fu, Rich, & Zaller, 2011; Comer et al., 2010). One study that evaluated the abuse of buprenorphine, buprenorphine-naloxone, and heroin found that the buprenorphine-naloxone combination had the lowest intravenous abuse rates and the lowest self-reported rating of desire to take the drug again

(Comer et al., 2010). Another study that examined self-reports from 100 opioid users found that opioid users who injected as a route of administration were more likely to report illicit diversion of buprenorphine/naloxone to "get high." Thus it appears intravenous opioid users have a higher potential for diverting the intended use of buprenorphine/naloxone, such as using it illicitly. However, those who report past illicit use of buprenorphine/naloxone described primarily using it illicitly to avoid withdrawal symptoms (74%), to deter opioid use (66%), and because of financial barriers to treatment (64%; Bazazi et al., 2011). This suggests that illicit buprenorphine use may be more motivated by attempts to self-treat addiction than an indicator of addictive behavior. Overall, these findings suggest that, despite the reservations of some who oppose buprenorphine, evidence of abuse potential of buprenorphine/naloxone when used as prescribed is nonexistent. Further, the rate of those who misuse, abuse and divert this medication to get high is relatively low.

Treatment structure. Typical OBOT involves three phases: (a) induction, including discontinuing the use of other opioids and determining the appropriate dose of buprenorphine; (b) stabilization, which initiates once withdrawal symptoms are managed; and (c) maintenance, which focuses on psychosocial issues related to opioid use disorder (SAMHSA, 2004). No standard length for treatment has been established. Patients in buprenorphine treatment may engage in short term treatment (i.e., less than 12 months) or indefinitely depending on the agreed upon treatment plan between client and provider (SAMHSA, 2005).

The recommendations for buprenorphine maintenance treatment suggest the following factors should be considered when designing individual treatment plans to address opioid use disorders: biopsychosocial needs; comorbidity of psychiatric, medical and other substance use disorders; legal issues; employment/financial issues; social and familial support; and somatic

impacts of drug use (Kraus et al., 2011; SAMHSA, 2005). These recommendations are important as they suggest that treatment should address factors above and beyond opioid use, for instance, biopsychosocial considerations. As such, it has been recommended that buprenorphine maintenance treatment include a psychosocial component (Kraus et al., 2011). However, based on standard outcome measurements such as retention and illicit opioid use, randomized controlled trials have not consistently found better treatment outcomes for buprenorphine plus psychosocial treatment (Amato, Minozzi, Davoli, & Vecchi, 2011; Moore et al., 2012; Weiss et al., 2011). Some evidence suggests that psychosocial treatment (e.g., cognitive behavioral therapy, supportive counseling) has no effect on retention (Amato et al., 2011; Moore et al., 2012), illicit drug use (Amato et al., 2011; Moore et al., 2012; Weiss et al., 2011), psychiatric symptoms, or treatment compliance (Amato et al., 2011). However, other evidence suggests buprenorphine plus psychosocial treatment and/or mutual support groups are associated with longer treatment retention (Stein, Cioe, & Friedmann, 2005), higher session attendance (Moore et al., 2012), and abstinence the week after treatment (e.g., a cognitive-behavioral therapy session; Moore et al., 2012) and at follow up (Amato et al., 2011). For example, in one study, buprenorphine maintenance treatment patients believed psychosocial treatment was important even when it was not required as a means to help them with psychosocial concerns (e.g., self esteem) and to share and connect with others with similar stories (Egan, Netherland, Gass, Finkelstein, & Weiss, 2011).

Some may interpret these results to suggest that physician monitoring may be sufficient for successful implementation of buprenorphine (Renner et al., 2014). Yet, when considered, psychosocial treatment has been shown to be effective in some studies. Still, many studies evaluate standard outcome measures (i.e., retention and consumption) and do not consider the

multifaceted benefits that may result from buprenorphine plus psychosocial treatment, such as improved coping and psychosocial functioning. Nevertheless, treatment recommendations often advise psychosocial treatment as a necessary component of buprenorphine maintenance treatment (Kraus et al., 2011; SAMHSA, 2005).

Efficacy. Buprenorphine has been established as an effective, safe, and well-tolerated drug (Davids & Gastpar, 2004) that increases client engagement and retention while reducing withdrawal effects and opioid use (ASAM, 2013; Kraus et al., 2011; Rieckmann et al., 2007; SAMHSA, 2004). Buprenorphine outperforms placebos for reducing cravings (Fudala et al., 2003), illicit opioid use (Fudala et al., 2003; Johnson et al., 1995; Kakko, Svanborg, Kreek, & Heilig, 2003), illicit use of other drugs (Kakko et al., 2003), requests for dose increases (Johnson et al., 1995), and treatment retention one year after initiating treatment (Kakko et al., 2003).

Methadone Compared to Buprenorphine

A nationwide analysis of medication-assisted treatment trends found that from 2002 to 2011, buprenorphine replaced methadone as the most commonly used medication-assisted treatment for opioid use disorders (Riksheim, Gossop, & Clausen, 2014). Moreover, attrition rates decreased and patients enrolled in treatment increased during this time (Riksheim et al., 2014). This illustrates that buprenorphine is increasingly becoming an important treatment option for those with opioid use disorders.

The clinical efficacy of buprenorphine compared with methadone has been mixed. Some studies have found that buprenorphine and methadone are similar in clinical efficacy as determined by urinalysis and illicit use of opioids (Kakko et al., 2007), heroin, and other drugs (Mattick et al., 2003). Similarly, studies comparing methadone and buprenorphine treatment outcomes, such as retention, abstinence, and illicit opioid use, have found comparable results

(Kakko et al., 2007; Johnson et al., 2000; Marsch et al., 2005; Sullivan, Chawarski, O'Connor, Schottenfeld, & Fiellin, 2005). Moreover, one study found that the higher dose of buprenorphine outperformed lower (but not higher) doses of methadone in retention and illicit opioid use (as measured by urinalysis; Johnson et al., 2000). However, another study found that higher doses of methadone (80 mgs/day) outperformed low-dose methadone (30 mgs/day) and fixed-dose buprenorphine (8 mgs/day) for treatment retention (Ling, Wesson, Charuvastra, & Kett, 1996). These results suggest that buprenorphine, especially at higher doses, is as effective or close to as effective as methadone in reducing risky behaviors associated with contracting infectious diseases (e.g., hepatitis and HIV), decreasing the use of illicit opioids, and retaining patients in treatment (Kraus et al., 2011). It should be noted that, while some studies have found Suboxone® and Subutex® are both effective in treating pregnant women (Debelak, Morrone, O'Grady, & Jones, 2013), Subutex® (buprenorphine without naloxone) tends to be prescribed because of naloxone's property of precipitating withdrawal symptoms.

Empirical evidence comparing buprenorphine and methadone treatment in pregnant women precludes a clear advantage for methadone and suggests that buprenorphine may be the medication-assisted treatment of choice with this population (Coyle et al., 2012; Fischer et al., 2006; Jones et al., 2005; Jones, O'Grady, Johnson, Velez, & Jansson, 2010; Pritham, Paul, & Hayes, 2012). One study found no difference in neonate abstinence syndrome and illicit opioid use (Jones et al., 2005). However, neonates who were exposed to buprenorphine stayed in the hospital for shorter periods of time than those who were exposed to methadone (Jones et al., 2005, 2010), required a smaller dose of morphine (Jones et al., 2010), had shorter treatment for neonate abstinence syndrome (Jones et al., 2010; Pritham et al., 2012), and had milder behavioral effects (e.g., excitability, overarousal, hypertonic symptoms, stress from abstinence, and self-

regulation; Coyle et al., 2012). When considering the outcomes for pregnant woman, one study found no differences in retention rates, but found that pregnant women in methadone treatment had less illicit opioid use than those in buprenorphine treatment (Fischer et al., 2006). Even though empirical support suggests buprenorphine performs well in treating pregnant women, further research is needed to establish the clinical efficacy of buprenorphine in special populations including pregnant women and adolescents (Kraus et al., 2011).

Patient preferences are another important consideration when comparing methadone to buprenorphine. In one qualitative study conducted in the United Kingdom, patients reported clearer thinking with buprenorphine compared to methadone, which in turn led to the need for more psychosocial treatment (Tanner, Bordon, Conroy, & Best, 2011). Individuals in buprenorphine maintenance treatment also reported higher confidence and less stigma compared to methadone maintenance treatment (Tanner et al., 2011). Another study found that patients perceived buprenorphine maintenance treatment to be effective at controlling opioid use, reducing cravings, improving their quality of life, allowing them to feel more normal, and prompting them to engage in treatment (Egan et al., 2011). Patients preferred buprenorphine maintenance treatment to methadone maintenance treatment because of the ability for autonomy, self-directedness of treatment and less rigid regulations (Egan et al., 2011). However, those with chronic pain and more severe opioid dependence may be less successful in buprenorphine treatment, and thus methadone is the recommended treatment for these populations given its properties as a full agonist (Renner et al., 2014).

Overall, evidence suggests that buprenorphine is as or more effective than methadone in treating opioid use disorders. When rapidly inducing treatment with flexible and sufficient dosing, buprenorphine is as effective as methadone (Maremmani & Gerra, 2010). Moreover,

buprenorphine is empirically recognized as superior to methadone in its safety profile (Kraus et al., 2011; Maremmani & Gerra, 2010). Further, mounting evidence suggests that buprenorphine is safe for pregnant women and provides some clear benefits (Coyle et al., 2012; Fischer et al., 2006; Jones et al., 2005; Jones et al., 2010; Maremmani & Gerra, 2010; Pritham et al., 2012). Additionally, buprenorphine offers an advantage to methadone treatment in terms of improving the access to care (Kraus et al., 2011; Maremmani & Gerra, 2010; Phillips & Preston, 2013).

In sum, there is a place for both methadone and buprenorphine treatments, as each have indicated uses and populations (Maremmani & Gerra, 2010). Because of its safety profile, administrative regulations, and patient preferences, buprenorphine may be a more useful option for early intervention of opioid use disorders (Renner et al., 2014). It may also be a useful treatment for those who do not wish to use methadone (Davids & Gastpar, 2004). Given that this medication is gaining popularity, has demonstrated efficacy, and is more accessible than methadone treatment, patients in buprenorphine treatment are a good target population for developing a patient-driven definition of success in medication-assisted treatment. Moreover, the different regulatory standards for buprenorphine treatment, compared to methadone treatment, may result in different experiences of success for those in OBOT programs compared to those in other opioid-treatment programs.

Treatment in Alaska

In the preceding sections, the efficacy of medication-assisted treatment for opioid use disorders was established. However, opioid-treatment programs and OBOT programs using buprenorphine are sparse in Alaska. In a single day in 2012, an average of 148 clients in Alaska were receiving methadone compared to 20 clients receiving buprenorphine (SAMHSA, 2013c). Although there are no statistics available to review current medication-assisted treatment in

Alaska, there are 41 physicians in 17 Alaskan communities on an Internet directory (Buprenorphine Doctors, March 27, 2015) who are providing OBOT. Nevertheless, both Alaskans that would benefit from medication-assisted treatment and Alaskan healthcare providers have identified a gap in services and a need for better access to medication-assisted treatment (Hewell, Vasquez, & Rivkin, 2016a). Additionally, the growing rates of opioid use and the efficacy of medication-assisted treatment, particularly buprenorphine, evidences the need for effective and accessible medication-assisted treatment in Alaska.

Conclusion

This section reviewed opioid misuse and the effective medication-assisted treatments. However, the criteria used to evaluate how treatment outcomes are defined and measured are contingent on how success in treatment is defined. The next section will review the variability in the way outcomes are measured and defined in the field of substance abuse. This will exemplify how historical ways of defining success and measuring outcomes in substance use treatment may be limited for understanding success for clients in buprenorphine treatment. Furthermore, this section will make the case that outcomes research would benefit from understanding how those in treatment define success.

Section B: Defining and Measuring Success

The field of substance abuse lacks agreement on what constitutes treatment success. Furthermore, treatment success often gets interchanged with the term *recovery*, which is also not clearly defined. Inconsistent definitions of treatment success and recovery from substance use disorders are established concerns in the field because they create challenges for measuring outcomes (Betty Ford Institute Consensus Panel, 2007; Butler Center for Research, 2011; Dodge, Krantz, & Kenny, 2010; Laudet, 2008; Laudet, Morgen, & White, 2006; White, 2007;

Witkiewitz, 2013), which thwarts progress in research and clinical practice (Betty Ford Institute Consensus Panel, 2007).

The following sections will review definitions of and issues with the construct of recovery. Then, features associated with treatment success will be discussed, including how success is traditionally measured, and issues associated with the typically narrow views of success. Finally, a case will be made for qualitatively exploring success from the patient's perspective of treatment success by reviewing qualitative literature on the subject.

Recovery

The term *recovery* has been historically associated with returning to health after trauma or illness in the medical field and within the 12-step community, yet has recently extended to other organizations, agencies, policies, and treatment efforts (Laudet, 2007, 2008; White, 2007). Particularly in 12-step programs such as Narcotics Anonymous (NA), this term, recovery, is used with the assumption that every individual with substance use disorders is powerless over the substances and must desire complete cessation of use to be a member (NA, 1988).

In the United States, 12-step program philosophy and the recovery construct have prevailing influences on substance misuse treatment. The 12-step model has substantially influenced the field of substance abuse's adherence to the disease model, and consequently frames most of the commonly available substance use treatment in the United States (Yalisove, 1998). Therefore, to understand success in treatment, it is also important to explore the term recovery. Although the construct, recovery is ambiguous some of the defining features are described below.

Defining features. One of the primary features of many definitions of recovery is that it is an active process or state of being, without a fixed endpoint (ASAM, 1982; Galanter, 2007;

Laudet, 2008; McLellan et al., 2007; SAMHSA, 2012; White, 2007). This assumes recovery is a moving target that requires constant maintenance and attention (McLellan et al., 2007; White, 2007). Additionally, the majority of the definitions of recovery involve abstinence, or the complete cessation of all psychoactive substances, as a prerequisite (ASAM, 1982; Dodge et al., 2010; Galanter, 2007; Laudet, 2008; McLellan et al., 2007).

Another aspect of recovery is the improvement of health/wellness (Dodge et al., 2010; SAMHSA, 2012; White, 2007) and physical or biomedical functioning (ASAM, 1982; Dodge et al., 2010). Many of the definitions of recovery also include relational elements, including family relationships (ASAM, 1982; Dodge et al., 2010; SAMHSA, 2012) and social functioning (Dodge et al., 2010; SAMHSA, 2012). Some even consider allegiance to those in recovery (e.g., through membership in NA) to be an important aspect of recovery (NA, 1988), and believe it is important to share one's recovery status with others (ASAM, 1982).

Improvements in psychiatric functioning, such as a mental disorder diagnosis (Dodge et al., 2010) and psychological functioning, such as emotional and cognitive difficulties (ASAM, 1982; Dodge et al., 2010; SAHMSA, 2012), are included in some recovery definitions. Healing from traumas caused by addiction (White, 2007) and working towards personal growth (Laudet, 2007, 2008) are included in others.

Similarly, the notion that recovery involves movement towards self-actualization and cultivating a sense of purpose or meaning in life is sometimes emphasized (Galanter, 2007; SAMHSA, 2012; White, 2007). Moreover, spirituality is a heavily emphasized element in many recovery communities (Dodge et al., 2010; Galanter, 2007; NA, 1988). For example, NA endorses the belief that individuals must admit they are powerless over substances and surrender their will to a Higher Power to absolve character deficits (NA, 1992). Consequently, some, but

not all, emphasize self-determination (e.g., "voluntarily choosing" recovery) as an important element of recovery (SAMHSA, 2012; White, 2007).

Other features that are included in many recovery definitions include acquiring life skills, engaging in self-care practices, and having stability in one's core needs, such as safety (ASAM, 1982; SAMHSA, 2012). Additionally, some suggest that moving towards recovery involves improvements in quality of life (Laudet, 2008; McLellan et al., 2007). In addition to improvements in ones' individual functioning, productively contributing to society (Dodge et al., 2010; SAMHSA, 2012; White, 2007) and adapting to life (Galanter, 2007) are also discussed as features of the recovery construct. In summary, the term recovery is used inconsistently. However, a key feature includes the assumption that abstinence is a requisite to a continual process of improving one's physical, social, psychological, and spiritual self.

Challenges with recovery. These inconsistent definitions of recovery tend to share three commonalities which pose challenges for professionals in the field trying to assess this construct, and for those in buprenorphine maintenance treatment: (a) the view that individuals with substance use disorders will continually struggle with addiction, (b) adherence to an abstinence-only model, and (c) lack of clarity and specificity.

An unclear, never-ending definition of recovery perpetuates the stigma associated with substance abuse by deemphasizing the genuine possibility of overcoming addiction and maintaining the message that addiction is a loss of control (Laudet, 2008). Additionally, this definition suggests an adherence to the medical model of addiction that explains addiction as a chronic, relapsing disease that is biologically based according to medical communities, and spiritually based according to 12-step communities, as opposed to a compilation of dynamic and interactive biological, psychological, sociocultural, and environmental factors (Thombs, 2006).

In consequence, this excludes some individuals, such as those in OBOT, from ever being able to enter into recovery given their use of a medication that has (or opponents to its use believe it has) the potential for abuse. This attitude is highlighted by the proposed criticism of medication-assisted treatments as "trading one drug for another."

Another apparent problem with the conceptualization of recovery is the emphasis placed on requiring abstinence, as this may not be the goal for all people with substance use disorders. For instance, it has been established that many individuals seek alcohol treatment with a goal of reducing their use, rather than completely abstaining (Dunn & Strain, 2013). However, identifying non-abstinence based goals becomes more complicated for illicit drug use given the often illegal and unregulated nature of these substances.

Abstinence as a requirement for recovery marginalizes individuals in replacement therapy, such as OBOT, by assuming they would never be able to attain recovery given their use of this medication. Additionally, recovery communities that require abstinence tend to perpetuate the stigma associated with the use of prescribed psychoactive substances, including the medication-assisted treatments methadone and buprenorphine, by discouraging medication-assisted treatment patients from speaking during support group meetings because they are "not clean" (White, 2007). It remains important to understand how OBOT patients understand the construct of recovery. Keeping in mind that they may have experienced stigma related to the term recovery, they may assume it is what they should strive for because it is the prevailing view in many treatment structures and that abstinence (complete cessation of all substances) is likely not a goal (at least short term) for these individuals.

Finally, attempting to create a single definition of recovery may be challenging because it is used in various ways, such as describing the actual lived experiences of an individual or

associating the term with treatment outcomes or organizational goals (White, 2007). Notably, the various uses of the term recovery present issues for operationally defining and measuring this construct. Some have defined recovery in terms of treatment outcomes, which attempts to add some clarity (McLellan et al., 2007). However, if outcome domains differ from how individuals attempting to overcome a substance use disorder define recovery, this approach still neglects to capture what is important to the individuals themselves. Although it is important to understand how patients define recovery, it may be more important to understand how they define tangible and achievable gains, such as treatment success. As such, factors associated with treatment success, how it is measured, and controversies in defining and measuring success will now be reviewed.

Success

The field of substance abuse noticeably lacks consensus on what comprises recovery, which makes measuring the "process of recovery" problematic. A clearer way of measuring improvements in substance use disorder treatment may be to define treatment success and to assess treatment outcomes accordingly. However, instead of evaluating the multidimensional factors related to substance use, standard outcome domains tend to have a narrow focus on consumption (Butler Center for Research, 2011; Miller & Miller, 2009; Tiffany et al., 2012) and even more narrowly on abstinence, or the complete cessation of all substances (Carroll et al., 2014; Miller & Miller, 2009; Tiffany et al., 2012; Witkiewitz, 2013). A focus solely on abstinence is problematic because it lacks sensitivity to other changes that may be made in treatment, and overlooks positive changes that are made if one reduces their use (e.g., using a few times would be considered a "treatment failure"; Carroll et al., 2014).

In addition to inconsistent and overly demanding definitions of recovery that emphasize abstinence, the field of substance abuse also lacks consensus regarding what constitutes "clinically significant change" in illicit drug use treatment beyond abstinence. This is, in part, because it is challenging to define "normative" or "low-risk" drug use (Carroll et al., 2014; Witkiewitz, 2013). Moreover, current approaches to defining and measuring success may neglect to address key concerns the patient has beyond consumption (Miller & Miller, 2009).

Inconsistent and narrow (i.e., abstinence-only) standards for defining and measuring illicit drug use treatment success impedes researchers' abilities to measure differences between treatments, our abilities to measure attributes of effective treatment programs, clinicians' abilities to understand and apply "what works" in treatment, and patients' abilities to demonstrate and be recognized for the gains they make in treatment if they do not achieve abstinence.

Multidimensional factors related to substance use. Empirical research demonstrates that there are several factors above and beyond consumption that impact addiction and treatment success. This is in line with the biopsychosocial model of addiction, which considers the biological (e.g., neurobiology, brain structure, genetics), psychological (e.g., emotional problems, social stigma, comorbidity, motivation), and sociocultural (e.g., age, race, gender, family, social contexts) elements that impact addiction's development, progression, maintenance, and indicated treatment (Miller & Carroll, 2006). Specifically, motivation, pain, substance use expectancies, physical and psychological functioning, stress, craving, self-efficacy, and social support related to opioid misuse will be briefly reviewed below.

Motivation has demonstrated impacts on substance misuse treatment (Miller & Carroll, 2006) and is an important consideration for substance misuse assessment (Tonigan, 2004). For opioid misuse, motivations for use that are associated with opioid-related problems include pain,

social pressures, coping with emotional distress, and enhancement expectancies, or the belief that substance use will enhance a desired experience (Jones, Spradlin, Robinson, Tragesser, & Tusel, 2014). Pain intensity and the expectations for pain relief in particular play an important role in opioid misuse (Ashrafioun, Bohnert, Jannausch, & Ilgen, 2015; Jones et al., 2014).

Physical and psychological functioning are also associated with opioid misuse (Ashrafioun et al., 2015). In particular, stress plays a role in opioid addiction. Opioid dependent individuals have been found to report more stress (Hyman et al., 2009; Jaremko, Sterling, & Van Bockstaele, 2015) and less use of adaptive coping (Hyman et al., 2009) compared with those who are not dependent on opioids. Additionally, abnormal and high cortisol levels are found more often in opioid-dependent individuals compared to controls, and these abnormal cortisol levels have been associated with an increase in the likelihood that an individual will discontinue methadone maintenance treatment by nearly 8 times (Jaremko et al., 2015). Moreover, the medication lofexidine, which reduces opioid-seeking behavior in animals, has also been found to reduce stress and opioid cravings in individuals who are dependent on opioids (Sinha, Kimmerling, Doebrick, & Kosten, 2007). Importantly, substance craving is especially profound in addiction (Tiffany et al., 2012) and predicts opioid use for those in buprenorphine maintenance treatment (Tsui, Anderson, Strong, & Stein, 2014).

Two other important constructs related to treatment outcomes in substance use disorders include self-efficacy (Ilgen, McKellar, & Tiet, 2005; Tiffany et al., 2012), defined as confidence in one's ability to do something (e.g., be abstinent or not use), and perceived locus of control (Tonigan, 2004), which is the belief that change is within one's power. In one study, self-efficacy about participant's perceived ability to abstain from using heroin in specific situations predicted a reduction in illicit opioid use for those in methadone maintenance treatment at 30 and

90 days into treatment (Reilly et al., 1995), while abstinence self-efficacy was found to be highly associated with successful abstinence at a one-year post-discharge follow up for participants in substance use disorder treatment (Ilgen et al., 2005).

Family history and social support are recognized as important external factors that impact addiction and treatment (Tonigan, 2004). For those with opioid use disorders, lower quality of social support relates to higher perceived stress, which in turn is associated with greater opioid misuse (Hyman et al., 2009).

Clearly, several factors impact addictive behavior and treatment success, yet these factors are not consistently evaluated as outcomes. The ways outcomes tend to be measured in substance use treatment will now be reviewed.

Measuring Success

Outcome domains. Outcome domains and outcome measures are used to assess changes in the patient that occur due to treatment (McLellan et al., 2007; SAMHSA, 2010b; Tonigan, 2004). Three outcome domains have been commonly used since the 1960s to assess treatment outcomes, including substance consumption (SAMHSA, 2010b; White, 2007), employment status/the ability to support oneself, and criminal activity (Donovan et al., 2011; McClellan et al., 2007; SAMHSA, 2010b). Other domains that are also deemed to be important will be reviewed below.

Consumption. The most standard measure of outcomes is the quantity and frequency of substance use within a specific time-period (Butler Center for Research, 2011; Donovan et al., 2011). Abstinence tends to be used as the "gold standard" in measuring substance use outcomes, likely because if an individual is not using at all, they do not meet criteria for a substance use disorder. Additionally, abstinence is assumed by many to be vital for improvements in other

domains (McLellan et al., 2007). Moreover, it is notably difficult to define "low risk" drug use, even for alcohol, a legal substance with a large body of research (Witkiewitz, 2013). Additionally, providers tend to conceive abstinence as the desirable intermediate and short-term goal for illicit drug use treatment, compared to alcohol and cannabis where a reduction in harm is more acceptable (Rosenberg, 2014). These provider perspectives likely impact the treatment emphasis and subsequent target outcomes for those in illicit drug use treatment.

The consumption-related outcome of abstinence is not applicable for all patients, given that not all individuals have the goal of abstinence. Also, by using an opioid to treat opioid use disorders, proponents of abstinence-only medical models, including some 12-step organizations, would argue that individuals in this treatment are not abstinent. These issues are compounded in terms of defining success for illicit opioid use, where defining constructs such as "low risk" use are especially difficult than with alcohol because of the challenge in defining "normative" illicit drug use (Carroll et al., 2014; Witkiewitz, 2013).

In addition to abstinence, other ways to measure consumption include frequency of drug positive urinalysis and self-reported reductions in frequency of use (Carroll et al., 2014). Even though consumption-related outcomes do not fully capture the intricacies of substance use treatment, drug-taking behaviors (measured by both biological screens, such as urinalysis, and self-report) continue to be recommended as primary outcomes for randomized controlled trials (Donovan et al., 2011). However, this does not capture a comprehensive snapshot of treatment success. Additionally, the assumption that reduced quantity and frequency of an abused substance is what all patients deem as successful treatment is unfounded (further discussed in OBOT outcomes subsection).

Other outcomes. Establishing commonly agreed upon outcome domains and measures that focus on factors above and beyond consumption is challenging (Tiffany et al., 2012; Witkiewitz, 2013). Yet they are essential to research and evaluation (Butler Center for Research, 2011). Employment status and functioning (Butler Center for Research, 2011; SAMHSA, 2010b), citizenship (e.g., contribution to society and service; White, 2007), stability in one's housing environment (SAMHSA, 2010b; White, 2007), and criminal activity are some outcomes that have been used for evaluation. Health, both physical (Butler Center for Research, 2011; McLellan et al., 2007; White, 2007) and mental (McLellan et al., 2007; White, 2007), are also used and recommended outcome variables. Psychosocial (McLellan et al., 2007; SAMHSA, 2010b; Tiffany et al., 2012) and family functioning (McLellan et al., 2007), relationships (White, 2007), and social support (Tiffany et al., 2012) have been used and are recommended as important substance use disorder outcomes. Craving and self-efficacy are also recommended for consistent use as outcome variables based on their empirical relationship to substance misuse (Tiffany et al., 2012).

More recently, quality of life has been recognized as an important outcome (Butler Center for Research, 2011; Miller & Miller, 2009; Tiffany et al., 2012; White, 2007), which predicts the maintenance of treatment gains like remission at 1 and 2 years post-treatment (Laudet, Becker, & White, 2009). Quality of life can be assessed based on an individual's subjective report across wellbeing domains, including: safety and security, relationships, health, connectedness with the community, spirituality, self-esteem, sense of meaning, and creativity (Cummins, Eckersley, Pallant, Van Vugt, & Misajon, 2003; Wasserman, Sorensen, Delucchi, Masson, & Hall, 2006). Relatedly, subjective wellbeing is accentuated as something that should

be measured given that the patient's subjective happiness should be better after treatment than when they were addicted (Miller & Miller, 2009).

Treatment process outcomes. In addition to the outcome domains reviewed above, some outcomes measure the process of treatment, including access to services, quality of services, treatment retention, engagement, and the therapeutic alliance. Access to services and the quality of services may be important outcomes for organizations and systems to monitor their treatment performance (McLellan et al., 2007; SAMHSA, 2010b).

Treatment retention, or an individual's continued attendance in treatment (i.e., duration and frequency), is one of the most frequently used outcome measures related to the process of treatment (McLellan et al., 2007; SAMHSA, 2010b), even though it may be less sensitive to therapeutic change than other outcome measures (Carroll et al., 2014). Although treatment retention may be an important consideration related to treatment process outcomes, treatment engagement may be even more important (Lee & Zerai, 2010; Reisinger et al., 2003). In fact, based on hundreds of empirical findings across 40 years of research, engagement has been found to be one of the best predictors of treatment success (Mee-lee, McLellan, & Miller, 2010; Orlinsky, Grawe, & Parks, 1994).

Treatment engagement has been described as motivation and participation in treatment (Mee-lee et al., 2010; Orlinsky et al., 1994; Reisinger et al., 2003). Harm-reduction programs emphasize the importance of demarginalization (including being treated with respect by providers and developing trust) as a requisite to engagement (that is, patient-identified treatment outcomes begin to be articulated as trust is deepened) and successful treatment (Lee & Zerai, 2010).

The therapeutic alliance is another fundamental attribute of effective treatment that involves agreement between therapist and patient on the goals, task, and their therapeutic bond (Bordin, 1979). The therapeutic alliance has been demonstrated to play an important role in substance use disorder treatment outcomes, accounting for 50-66% of the variance in outcomes for alcohol use (Miller, Willbourne, & Hettema, 2002; Luborsky, Barber, Siqueland, McLellan, & Woody, 1997). Therapeutic alliance has been found to predict better outcomes by impacting drinking behavior, consumption, and participation in alcohol use disorder treatment (Connors, Carroll, DiClemente, Longabaugh, & Donovan, 1997) and improving outcomes for those with opioid dependence (Luborsky et al., 1997). Clearly, therapeutic alliance and treatment engagement are well established as important treatment process outcomes that should be considered in addition to other commonly measured variables of treatment retention. It should be noted that five outcome domains reviewed above including change in self-efficacy, drug craving, social support, quality of life, and psychosocial functioning were recommended for evaluation in substance misuse treatment based on one assessment of critical outcome measures (Tiffany et al., 2012), while retention, reduction in frequency of substance use, and complete abstinence were identified as outcomes that should be eliminated from illicit drug use treatment evaluation as these variables lack sensitivity to therapeutic change (Carroll et al., 2014).

OBOT outcomes. Standard outcomes, such as long-term abstinence, traditionally measured by continuous, prolonged, point prevalence, and repeated point prevalence, have been established for the legal drug nicotine (Carroll et al., 2014; Donovan et al., 2011). Even though consumption is the primary outcome for another legal drug, alcohol, attempts have been made to narrow in on the issues of abstinence versus "low risk" alcohol use by integrating measures that

encapsulate both (Donovan et al., 2011). No known standards or efforts have been proposed for medication-assisted treatments, such as OBOT.

In a qualitative study which used interviews with 18 staff members and 32 patients in two harm-reduction programs, participants identified the following positive treatment outcomes: feeling respected and engaged in treatment, improvements in quality of life, social functioning, goal reappraisal, and symptom reduction (Lee & Zerai, 2010). Meanwhile, these patients' providers defined positive outcomes as "any positive change" (p. 2411) in the patient and "planting a seed" (p. 2433) by instilling lessons that could inspire change at a later date (Lee & Zerai, 2010).

Specific to opioid use, some measures have been developed to assess domains relevant to opioid misuse, such as The Opiate Treatment Index (Darke, Hall, Wodak, Heather, & Ward, 1992), The Current Opioid Misuse Measure (Ashrafioun et al., 2015), and The Opioid Prescription Medication Motives Questionnaire (Jones et al., 2014). These measures comprise domains that include: drug intoxication; HIV risk-taking behavior; healthcare use patterns; criminality; psychological adjustment, coping, and emotional volatility; health and social functioning/pressures; pain; poor response to medication; addiction and problematic medication use; and enhancement expectancies (Ashrafioun et al., 2015; Darke et al., 1992; Jones et al., 2014). Nevertheless, many buprenorphine maintenance treatment studies use only standard outcome measures, including retention (Amato et al., 2011; Kakko et al., 2003; Moore et al., 2012; Stein et al., 2005), illicit drug consumption (Amato et al., 2011; Fudala et al., 2003; Johnson et al., 1995; Kakko et al., 2003; Moore et al., 2012; Weiss et al., 2011), craving (Fudala et al., 2003), psychiatric symptoms, and treatment compliance (Amato et al., 2011).

Although a few published studies have qualitatively explored patient perspectives about factors related to treatment success in general harm reduction programs (Lee & Zerai, 2010) and methadone maintenance treatment (Redden, Tracy, & Shafer, 2013), no known studies have explored what is involved in treatment success from the perspective of patients in OBOT. In one qualitative study that conducted eight focus groups with 68 medication-assisted treatment patients, treatment was described by some participants as "liquid handcuffs" and a "crutch" that leaves them still dependent (Redden et al., 2013). These findings suggest that patients had fairly negative views of methadone maintenance treatment, but the study did not extensively elucidate what patients believed constituted success in this treatment. Further, given that methadone maintenance treatment has a different treatment structure and regulatory requirements than OBOT (that is, methadone maintenance treatment must be dispensed in a regulated dispensary as opposed to in a primary care office by a physician), it is important to investigate the factors OBOT patients identify as being important for their success.

Another preliminary study, which established the foundation for this dissertation's aims, qualitatively explored how individuals who would benefit from medication-assisted treatment described a process of success in substance use treatment and recovery from opioid misuse (Hewell et al., 2016b). Participants in this study described success as involving intrapsychic factors (e.g., being open-minded, having self-acceptance, taking responsibility for changing), interpersonal factors (e.g., feeling connected and having healthy social support), reaching a critical mass point (e.g., a point when the person starts to shift and begin making changes), and engaging in a "living program of recovery" (e.g., individualized treatment plans, continuing to fight for recovery). Although these findings began to illuminate some potential factors that may be important in OBOT patients' definitions of success, it was not the primary focus of the study.

Further, it included a sample of "people who would benefit from medication-assisted treatment," and were not necessarily already in treatment. Therefore, a comprehensive study that explores how patients in an OBOT program define success will provide a more complete understanding of successful treatment that is specific to OBOT.

A Case for a Patient-Informed Definition of Success

There appears to be the beginnings of a paradigm shift encouraging researchers, evaluators, and treatment providers to consider outcome domains above and beyond consumption-related measures (Carroll et al., 2014; Tiffany et al., 2012; Tonigan, 2004; Witkiewitz, 2013). In addition to suggestions based on research, this effort also needs to be driven by the factors that patients deem important. Although Tiffany and colleagues (2012) recommend domains be empirically established as related to substance misuse broadly, patients may illuminate domains that are not already established in the literature, or they may afford more weight to some domains over others. For instance, factors beyond consumption tend to be important to individuals in treatment, and to the significant people in their lives (Witkiewitz, 2013). Moreover, if the patient's goal is "low risk" use, it is important to define what this means from his or her perspective. We currently have a poor understanding of what constitutes meaningful change from patients' perspectives and more specifically what are important domains for measuring success for individual in OBOT.

It is important to understand the factors that are important to patients in treatment, as these likely relate to motivation to change, successful treatment outcomes, retention, and engagement (Miller & Miller, 2009). A qualitative design that explores patients' perspectives has the potential to enlighten researchers, evaluators, and treatment providers about how patients

define success and recovery, the factors they believe are barriers and facilitators to their success, and the qualities that should be evaluated to assess success in treatment outcomes.

Chapter 3: Research Design and Methodology

Overarching Study Design

This qualitative study explored patients' perspectives on treatment success in an in Office-based Opioid Treatment (OBOT) program. This was achieved by conducting a focus group with seven participants and subsequent interviews with seven participants, two of which were also in the focus group, for a total of twelve OBOT patients in rural Alaska. This section will outline the study's rationale and the theoretical assumptions.

Project rationale. As discussed in Chapter Two, there remains uncertainty regarding how treatment success should be defined and measured for Suboxone®. This study aimed to build a patient-driven definition of successful treatment that identified the factors patients deem important to treatment success. To achieve this aim, a qualitative design was employed, and the study drew from the techniques of grounded theory (Charmaz, 2006), directed content analysis (Hsieh & Shannon, 2005), and the principles of community based participatory research (CBPR; Israel et al., 1998; Kemmis & McTaggart, 2005). Accordingly, the research questions included the following:

1) How do OBOT patients define OBOT success?

2) How do OBOT patients define recovery?

3) What facilitators and barriers do these patients identify as relating to their definition of OBOT success?

4) What factors do these patients identify as important for measuring OBOT success?

Theoretical assumptions. The following outlines the theories and approaches that informed this study, including constructivism, community based participatory research (CBPR), grounded theory, and directed content analysis. Elucidating assumptions about the nature of

knowledge (ontology), the relationship between the researcher and participants (epistemology), and about how knowledge is acquired (methodology) builds qualitative rigor, or trustworthiness (Morrow, 2005; Roulston, 2010).

Constructivistic assumptions. This study is based on the constructivistic paradigm with an emphasis on symbolic interactionism. The ontological assumption of constructivism is that multiple realities exist (Charmaz, 2006; Israel et al., 1998). The symbolic interactionism emphasis assumes that individual behavior is developed agentically in a social context and not mechanically produced (Charmaz, 2006). As such, the researchers and the research participants (OBOT patients) are expected to bring their subjective experiences and symbolic meanings into shared interactions. These assumptions helped to inform the design, data collection, and data analyses of this study.

Specifically, this study intended to interpret the dynamics and subtleties of how individuals make meaning of OBOT treatment success (Charmaz, 2006). The researchers endeavored to enter into the reality of the OBOT patients in attempts to iteratively interpret and reconstruct their subjective meaning of success (Charmaz & Belgrave, 2012; Israel et al., 1998).

CBPR principles. This study adhered to the principles of CBPR (see Table 3.1, Column 1, Principles) as defined by Israel and colleagues (2001) and Kemmis and McTaggart (2005). As illustrated in Table 3.1, Column 2 (Study Adherence), this study was grounded in a reflexive-dialectical CBPR approach (Kemmis & McTaggart, 2005). This CBPR approach is ontologically, epistemologically, and methodologically consistent with the assumptions of constructivism. Specifically, it assumes there is no one truth that can be known (ontology), suggests that the process of studying a phenomenon creates change (epistemology), and purports

that the research should explore basic assumptions about truth in a reflexive and intersubjective manner (methodology).

Table 3.1
CBPR Principles Informing the Current Study

Principles	Study adherence
1. Shared Ownership	This study was founded on a long-term commitment and collaboration between the lead researcher and the professional advisors. This included sharing the following: involvement throughout the study, establishment of study priorities, voice in data interpretation, determinants for the dissemination of findings, and benefits of integrating knowledge with action.
2. Community Analysis of Social Problems	This study's focus emerged from a preliminary CBPR study aimed at identifying and addressing barriers to buprenorphine treatment in the Interior region of Alaska (Hewell et al., 2016a). Multiple stakeholders, including the current professional advisors, study participants, and the Alaska Advisory Board for Alcohol and Drug Abuse, were involved in interpreting findings and determining future directions, which included the current study.
3. Strength-based and Empowerment Focus	This study focused on the strengths of patients in OBOT. It also intended to empower professional advisors to promote OBOT success in their community.
4. Community Action	This study was committed to identifying the needs of patients in the community through its consideration of contextual variables (Israel et al., 2001). Involving participants in interpreting findings helped evoke community change determined necessary by patients (Kemmis & McTaggart, 2005).
5. Iterative and Cyclical Process	Data were collected, analyzed, and interpreted with OBOT patients and professional advisors throughout the project to co-create a shared understanding. Regular communication with a professional advisor supported the iterative and cyclical process.

A discovery-oriented approach, such as CBPR, has been identified as the most effective approach to understanding local perspectives, identifying culturally grounded priorities, and determining interventions and evaluation strategies based on this knowledge (Lau, Chang, & Okazaki, 2010). This approach emphasizes practice-based evidence (Lau et al., 2010). The ethics of CBPR will be further discussed in the Ethics section.

Grounded theory. This study was rooted in a constructivistic grounded theory approach as outlined by Charmaz (2006). Grounded theory explores phenomena with limited theoretical or empirical information, such as success in OBOT. The goal was to generate theory (Charmaz & Belgrave, 2012) by using investigative, non-speculative empirical observation, with a focus on substantive face-valid data (Dey, 2007).

This study moved away from post-positivism (a philosophical research stance that acknowledges the researcher's bias, yet still seeks objectivity) by affording a flexible, meaning-focused stance. Data were gathered inductively, analyzed comparatively and iteratively, and interpreted interactively (Charmaz, 2006). The goal was to understand how participants create meaning of a particular phenomenon—success in OBOT—by attempting to get as close to the study participants' experience as possible (Charmaz & Belgrave, 2012). The end product is a substantive, context-dependent definition of success in OBOT (Bryant & Charmaz, 2007).

Directed content analysis. In addition to grounded theory, this study also used techniques of directed content analysis as outlined by Hsieh and Shannon (2005) to frame and analyze the data. Qualitative content analysis is focused on clarifying the content and contextual meaning of the language within a text (Hsieh & Shannon, 2005). This approach to data analysis still assumes a naturalistic orientation, yet it uses both deductive and inductive approaches. Therefore, it is useful when there is a priori knowledge, but researchers are open to expanding upon the existing

theory. Analysis began by using a systematic process to sort data into themes based on existing theory with flexibility to refine, add, or omit constructs and concepts that were not grounded in the data. As such, analysis started with a clear framework (Hsieh & Shannon, 2005) with the goal to further elucidate the studied phenomenon (Downe-Wamboldt, 1992).

Detailed Methodological Approach

This study was conducted in three phases, including a focus group, semi-structured interviews, and a findings forum. Accompanying aims and methods of each phase are summarized in Table 3.2.

Table 3.2
Summary of Study Phases, Aims, and Methods

Phase I. Focus group
Aim: Refine the descriptive framework of patient success in OBOT.
Method: Eligible participants were invited to participate in an initial focus group. The focus group protocol and questions can be found in Appendix D. Findings that emerged from this phase informed recruitment for Phase II.
Phase II. Semi-structured telephone interviews
Aim: Enhance the framework of OBOT success and develop a substantive patient-driven definition of OBOT success.
Method: Semi-structured, in-depth telephone interviews were conducted with participants who were recruited through theoretical sampling. Telephone interviews were conducted until saturation was achieved.
Phase III. Findings forum
Aim: Verify and further refine the findings from Phases I and II.
Method: Using grounded theory techniques of member checking (Charmaz, 2006) and CBPR principles of shared ownership, strength-based and empowerment focus, and community action (Israel et al., 2001; Kemmis & McTaggart, 2005), study participants were invited to co-interpret findings from Phases I and II.

Research team. The backgrounds of the research team are discussed to increase transparency and qualitative trustworthiness. As the author of this dissertation and a PhD student in a Clinical-Community Psychology program, I (Valerie Hewell) led this team. I have background knowledge in substance abuse through research and clinical practice. Therefore, to minimize the influence of biases, Gabriel Cartagena, a UAF undergraduate student, assisted with focus group data collection and the data analysis. The dissertation study was co-chaired by Ellen Lopez, MPH, PhD, trained in public health, with expertise in cancer prevention and control, qualitative methods, and CBPR, and Vivian Gonzalez, PhD, trained in clinical psychology, with expertise in substance abuse and quantitative methods.

Consistent with the CBPR principles outlined by Israel and colleagues (1998), the research team also included two professional advisors. These two masters-level substance abuse counselors offered extensive knowledge and understanding of the challenges and successes related to OBOT and have long-standing positive working relationship with me. One advisor, Gunnar Ebbesson, assisted in informing project conceptualization and pilot testing study processes and instruments. The other advisor, Cici Schoenberger, assisted in identifying the project aims. Ms. Schoenberger was readily available throughout the study for consultation, which encouraged collaborative and transparent decision-making (Mikesell, Bromley, & Khodyakov, 2013). Partner communications involved discussing the study protocols, cultural and ethical issues, participant recruitment, data interpretation, and future directions. For a detailed synopsis of their roles and responsibilities, see Appendix B.

Setting. This study was conducted within a partnership between Sunshine Community Health Center: an integrated health clinic in the rural Alaskan village of Talkeetna, and myself. Talkeetna is located approximately 114 miles from Anchorage within the Matanuska-Susitna

Borough. Located at the base of Denali (North America's highest peak), Talkeetna is the "jump off point" for climbing Denali and the Alaska Range. The village is a historic site marked by natural beauty (including the meeting of three rivers) and home to outdoor activities, such as fishing and hunting (Talkeetna Chamber of Commerce, 2012). In 2010, the census population was 876: 91% were Caucasian, almost 4% were Alaska Native, and slightly over 3% were two or more races. In terms of gender, 51.7% were male and 48.3% were female (United States Census Bureau, 2012b).

Program details. Sunshine Community Health Center (Sunshine) offers an OBOT program, which combines the use of Suboxone® with psychosocial substance abuse counseling. Their program encompasses several principles of comprehensive substance abuse treatment as defined by the National Institute of Drug Abuse, such as providing intake processing, treatment planning, substance abuse monitoring, peer-support groups, mental health services, behavioral therapy and counseling, clinical and case management, educational services, continuing care, medical services, and pharmacotherapy (NIDA, 2012).

The OBOT program was established in November 2009 and has had a total of three treatment providers: (a) one medical doctor from start of program in 2009 until June 2013; (b) a second medical doctor from November 2013 until present; and (c) one Licensed Clinical Social Worker, from start of program in 2009 until the beginning of the study (June, 2015). During the process of data collection, a new Licensed Clinical Social Worker was hired and began leading patient groups.

From the initiation of the OBOT program, there have been a total of 90 admissions, 35 of which are currently active. Fourteen patients left the program in good standing, 18 were

terminated by the clinic, five were suspended and may return with close supervision, and 17 dropped out.

Sunshine conducts two "beginning" groups that meet every other Thursday, one "advanced" group that meets the third Friday of the month, and "individualized" programs for those who meet criteria for the advanced group, but cannot attend the scheduled group due to external conflicts. Criteria for participating in the advanced group includes the following: (a) a minimum of six months abstinence from all substances (except Suboxone® and nicotine); (b) regular compliance with the program expectations; and (c) evidence of *recovery thinking*. Ms. Schoenberger, Sunshine's OBOT program director, defined *recovery thinking* as:

> *Thinking that involves healthy choice-making, thoughtful rather than impulsive decision-making, thinking based on feelings rather than the avoidance of feelings, and thinking about the impact of one's behavior on others rather than on just the self Recovery thinking is both a process and a goal for a person who has stopped actively using substances and is learning to shed the unhealthy thinking that was required to maintain the addiction (C. Schoenberger, personal communication, May 24, 2015).*

When data collection began (June, 2015), there were 21 patients in the advanced group or in individualized treatment and 14 patients in the beginner group. When the study ended (February, 2016), there were 16 patients in the beginner groups, 15 patients in the advanced group, and 11 in the individualized treatment.

I visited the clinic and sat in on the beginning and advanced groups in April 2015 to observe, build relationships, and gauge the feasibility of the study. Patients expressed enthusiasm

for the study and described their hopes that the study would positively impact future patients by educating providers.

Ethical considerations and human subjects protection. This study was approved by the University of Alaska Institutional Review Board. Study procedures were developed with consideration for specific ethical concerns, such as voluntary participation, confidentiality, and participant welfare.

Voluntary participation was emphasized during the informed consent process. Participants were asked to sign the Informed Consent Form before participating. Highlights from the form, including voluntary participation and confidentiality, were discussed verbally.

All physical data were stored behind a locked door in a locked cabinet. Confidential identifying information including names, contact information, and signatures on the informed consent were stored separately from the raw data. Each participant was assigned a random identification number to preserve confidentiality. All study-related material, such as Informed Consent Forms and demographic surveys, used this identification number. Paperwork was deidentified using these numeric identifiers. Qualitative data were de-identified by omitting names, dates, places, or other identifying information during the transcription process. All findings are reported in an aggregate format to protect confidentiality.

Data were shared among research team members using secure flash drives or the University of Alaska Fairbanks Life Science Informatics Secure File Share Service, a service that offers an operating system neutral file system. Electronic files were backed up onto the shared drive within 48 hours of modification. Project-related files were accessible only to team researchers who have successfully applied for a password protected account. Each researcher had access to the data used a password-protected computer.

To ensure participant welfare, researchers monitored participant distress throughout the study. Participants were told that they could stop the study at any time for any reason, and were encouraged to inform the researcher if the conversation became too distressing. At the end of the study, an empowerment debriefing procedure was taken to check for distress, and participants were offered a referral list.

Moreover, ethical conduct as set forth by the Belmont Report may not be sufficient in CBPR research (Mikesell et al., 2013). Therefore, this study was designed to adhere to the reflective-dialectical CBPR approach that attends to additional ethical considerations, including: collaboration, mutuality, shared decision-making, empowerment, transparency, and negotiation. By partnering with professional advisors, the study strived to enhance ethical standing by increasing cultural sensitivity, protecting participants, and minimizing the risk to the community (Mikesell et al., 2013). Moreover, this study prioritized each participant's confidentiality, in part, by only reporting results using aggregated or de-identified format. Even though participants and professional advisors had a role in data interpretation, they only had access to aggregate (not raw) data.

Funding. To compensate focus group, interview, and findings forum participants for their time and transportation costs, I successfully sought a small project grant from the Alaska Mental Health Trust Authority. This grant funded costs associated with transportation, participant compensation, data transcription, and data analysis software.

Eligibility, Recruitment, and Sampling Considerations

Inclusion criteria required that study participants be: (a) a patient in Sunshine's OBOT program, and (b) 18 years or older. In addition, participants would have been excluded if they were not willing to have the focus group, telephone interview, or findings forum audio-recorded.

The following section will describe considerations that were made for recruitment and sampling, while participant characteristics will be described on page 61.

Considerations for recruitment. In qualitative research, variation exists regarding recommended sample sizes. For focus groups, more than 12 participants may present challenges to moderating the focus group and allowing for full exploration, while less than six participants may present challenges in sustaining a conversation (Morgan, 1997; Onwuebuzie & Leech, 2007). However, it is suggested that researchers should over-recruit by approximately 25% (Powell & Single, 1996). Therefore, we aimed for a sample of six to twelve participants for the focus group, with a maximum of 18 participants.

For interviews, it is important to consider the homogeneity of the population when determining how many participants to sample (Onwuebuzie & Leech, 2007). In addition to considering the homogeneity of the population (e.g., Sunshine OBOT program), this study drew from insights gained in another qualitative study that used similar sampling approaches (nonprobalistic purposive sampling) and reached saturation (Guest, Bunce, & Johnson, 2006). Therefore, we aimed for an ideal telephone interview sample size range of six to twelve. Accordingly, between the focus group and the interviews, a maximum of thirty ($n = 30$) participants could have been recruited into this study.

Recruitment process. Participants were recruited for study Phases I and II by the Sunshine's OBOT program director, Ms. Schoenberger, via informational flyers and through word-of-mouth. Consistent with the theoretical sampling procedures outlined by Charmaz (2006), the recruitment and sampling process for the Phase II telephone interviews was data-driven, meaning that participants were sampled based on emerging thematic categories from Phase I that required clarification. For example, after Phase I was completed, it was determined

that an increased representation of patients in the beginner group was needed. In response, the beginner group was intentionally sampled for Phase II interviews.

Sampling approach. In qualitative research, sampling plays a vital role in establishing the parameters for a study. This study considered the setting, data collection processes, time of data collection, purpose, types of participants being sampled (e.g., heterogenic vs. homogeneous), and ability for saturation to be reached in the sampling process (Onwuegbuzie & Leech, 2007).

Multi-stage purposive sampling. This study used multi-stage, purposive sampling procedures combining criterion-based purposive sampling, theoretical sampling, and mixed purposive sampling techniques. As illustrated in Figure 3.1, the multi-stage purposive sampling techniques were used (left) with examples of the corresponding data collection and analysis processes (right). The second and third rows of this process (theoretical sampling, mixed purposive sampling and interviewing) were continued until no new themes emerged.

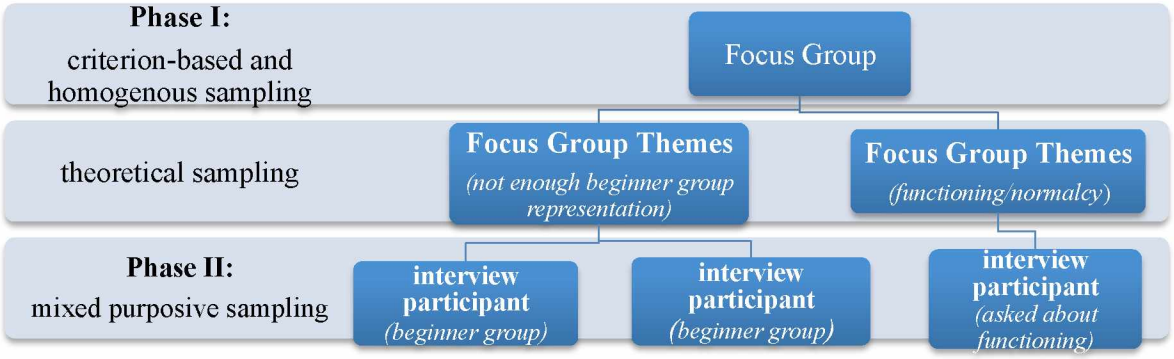

Figure 3.1. Multi-Stage Purposive Sampling Process. This figure outlines the process for sampling participants using theoretical sampling procedures.

Criterion-based and homogenous sampling. The Phase I focus group utilized criterion-based and homogenous purposive sampling to ensure only those participants that met inclusion

criterion were recruited for participation. This sample was homogenous in that the majority of participants (86%) were in the advanced group (discussed in detail on p. 61). This served as a "jumping off point" for informing emerging theoretical sampling techniques during Phase II (Draucker, Martsolf, Ross, & Rusk, 2007). As outlined by Glaser (1978), the initial sampling for the Phase I focus group was determined based on the community-identified problem and the research questions. Once data collection and analysis began, further sampling followed the lead of the emergent data using theoretical and mixed purposive sampling.

Theoretical and mixed purposive sampling. After Phase I focus group data were collected and analyzed, subsequent participants were selected for Phase II in-depth semi-structured telephone interviews based on the process of theoretical sampling. Theoretical sampling is used to expand, clarify, and refine data until saturation is reached, that is, until no new themes emerge (Charmaz, 2006). Using this process, themes that emerged from Phase I along with gaps in the data were used to inform the selection of participants for the next data collection phase. Participants were selected based on their ability to provide detail or clarification on specific topics. Additional participants were selected until data saturation was reached (Charmaz, 2006). For example, Phase I focus group participants described functioning/normalcy as an important theme, so Phase II telephone interview participants were asked probing questions to clarify, refine, and confirm/disconfirm attributes of this theme. Additionally, during Phase I, it became apparent that there was not sufficient representation from individuals in the beginner group, so theoretical sampling was used to select participants from the beginner group for Phase II interviews. This simultaneous process of collecting and analyzing data was used to explore and refine the definition of success in OBOT until a

comprehensive and accurate understanding of success and recovery was developed based on participants' perspectives and experiences (Charmaz & Belgrave, 2012; Dey, 2007).

Based on the theoretical sampling process described above, the research team used mixed purposive sampling to select and recruit participants, assist in theory development, and triangulate data (Onwuegbuzie & Leech, 2007; Patton, 2002). Mixed purposive sampling uses a combination of purposive sampling strategies to acquire the desired sample (Patton, 2002). Based on Patton's (2002) techniques, this study specifically used snowball sampling, extreme case sampling, maximum variation sampling, critical case sampling, and confirming/disconfirming cases sampling. Snowball sampling was used to recruit participants that were harder to access, such as clients in the beginner group. Extreme case sampling was used to understand the perspectives of those who were struggling to obtain success and those who did not adhere to an abstinence-only orientation. Maximum variation sampling was used to expand on initial data collection to obtain a representative sample, including targeted recruitment of beginner (as opposed to advanced) patients and those who were struggling (as opposed to being successful) in treatment. Critical case sampling was used to get the perspective of someone who was in the individual program and did not attend group. Finally, confirming/disconfirming cases sampling was used to sample a young beginner client who was struggling to be successful. Definitions of purposive sampling techniques can be found in Appendix A.

Compensation. Focus group participants were offered light refreshments and a $20 gift card to a local grocery store after completion of the focus group. Telephone interview participants and findings forum participants were offered a $20 gift card to a local grocery store. To protect participant confidentiality, telephone interview participants were asked to inform Ms. Schoenberger when they completed the interview. Ms. Schoenberger then provided them with

their gift card, a copy of the Informed Consent Form, and a Referral Sheet if they had not already received these forms through email.

Participant Characteristics

Of the 12 total participants in this study, seven participated in the Phase I focus group and seven participated in the Phase II telephone interviews. Two Phase II participants also participated in the focus group. Demographic information for each phase, and for the entire sample of this study, is outlined below and detailed in Table 3.3.

Focus group. Seven Sunshine OBOT patients participated in the focus group. The majority (86%, $n = 6$) were in the advanced group and female (57%, $n = 4$). Ages ranged from 30-72 years ($M = 39$, $SD = 20$). Fourteen percent ($n = 1$) were in the beginner group. Participants in this focus group had been in outpatient treatment from 3 to 65 months, that is five years ($M =$ 41 months, $SD = 23.2$).

Interviews. Those who chose to participate in Phase I were also eligible to participate in Phase II. Therefore, two of the seven interviews were conducted with participants who also participated in the Phase I focus group. As a sample, interview participants were younger and more similar in age compared with focus group participants. Ages ranged from 22-57 years ($M =$ 35, $SD = 10.9$). More of this sample was unemployed compared to focus group (71%, $n = 5$), with the remaining 14% being a student ($n = 1$) and 14% being retired ($n = 1$). Additionally, more of this sample was in the beginning group (71%, $n = 5$). Interview participants in this group had been in outpatient treatment from 2 to 108 months, that is nine years ($M = 34$ months, $SD =$ 39.4).

Combined. Of the combined 12 participants from Phases I and II, 58% identified as male, and 100% identified as Caucasian. Ages ranged from 22 to 72 years ($M = 39$,

SD = 14). The combined sample is comparable to the program director's report of the population (patients in Sunshine Clinic's OBOT program), of which 58% were also male and 95% were Caucasian (with the remaining 5% being Alaska Native or mixed). Ages in the total population ranges from 21 to 72 years (*M* = 38, *SD* = 12).

Participants from the total sample had been in outpatient treatment from 2 months to 96 months, that is nine years (*M* = 39.7 months, *SD* = 32.3). Twenty-five percent (three of the twelve) combined participants indicated they had tried Narcotics Anonymous meetings, but are no longer attending because it was "not very helpful," there were "too many drugs at the meetings," or they "didn't like it."

The majority (58%) reported living in rural areas while 25% lived in an urban area and 17% lived between a rural and urban area. More than half of the participants (58%) reported having children. In terms of marital status, 42% reported being married, 25% were single, 17% were divorced, and 17% were in a relationship. Half of the participants reported being unemployed or laid off, 33% worked full time or were students, and 17% were retired or disabled. In terms of income, most reported having enough money to meet their needs (67%) while 33% struggled to meet their needs.

Table 3.3
Demographics for Research Participants

	FG n (%)	Interviews n (%)	Total N (%)
Sample	7 (-)	7 (-)	12 (-)
Gender			
Male	3 (43%)	5 (71%)	7 (58%)
Female	4 (57%)	2 (29%)	5 (42%)
Ethnicity			
Caucasian	7 (100%)	7 (100%)	12 (100%)
Age			
18-30	1 (14%)	2 (29%)	2 (17%)
31-48	3 (43%)	4 (57%)	7 (58%)
49-72	3 (43%)	1 (14%)	3 (25%)
Lifestyle			
Geography			
Rural	3 (43%)	4 (57%)	7 (58%)
Urban	2 (29%)	2 (29%)	3 (25%)
Rural/Urban	2 (29%)	1 (14%)	2 (17%)
Relationship Status/Family			
Married	3 (43%)	3 (43%)	5 (42%)
Single	1 (14%)	2 (29%)	3 (25%)
Divorced	2 (29%)	1 (14%)	2 (17%)
In a relationship	1 (14%)	1 (14%)	2 (17%)
Have children	5 (71%)	4 (57%)	7 (58%)
Employment			
Unemployed	1 (14%)	5 (71%)	5 (42%)
Employed full time or student	3 (43%)	1 (14%)	4 (33%)
Retired or disabled	3 (43%)	1 (14%)	2 (17%)
Financial Stability			
Have enough to meet their needs	4 (57%)	4 (57%)	8 (67%)
Struggle to meet their needs	4 (57%)	3 (43%)	5 (42%)
Treatment Group			
Beginning Group	1 (14%)	5 (71%)	5 (42%)
Advanced Group	6 (86%)	1 (14%)	6 (50%)
Individual Program	0 (0%)	1 (14%)	1 (8%)

Note. FG = focus group

Data Collection

Instruments. Demographic data were collected using a pen-and-paper survey for the focus group. Demographic questions were asked verbally during the interviews. Qualitative data were collected during the Phase I focus group and Phase II in-depth telephone interviews using a semi-structured interview guide. As stipulated in the Informed Consent Forms, the focus group and telephone interviews were audio-recorded for the purposes of review and transcription.

Demographic survey. After providing their informed consent, participants completed a demographics questionnaire. The survey began with demographic questions such as age, residence, and ethnicity. Then, questions about past and current health, including mental health, physical health, social functioning, and spiritual wellbeing, were asked. Questions were informed by those used in national surveys such as the Behavioral Risk Factor Surveillance System 2014 Questionnaire and other studies (CDC, 2013; Mee-Lee, 2013). The next questions asked about opioid use and treatment history (informed by, Mee-Lee, 2013; Miller & Appel, n. d.). Finally, participants were asked about their perspectives related to substance abuse recovery (e.g., if they consider themselves in recovery and why; informed by Laudet, 2007; Luke, Ribisi, Walton, & Davidson, 2002). The demographic survey was reviewed and pilot tested by professional advisors, researchers, a Ph.D. student with clinical experience in working with people with substance use disorders, and individuals without a background in substance misuse research or treatment.

Phase I: Focus group. This study's focus group protocol development— including the process and procedures for conducting focus groups, establishing ground rules, facilitating discussion, and taking notes—was informed by the *Toolkit for Conducting Focus Groups* (Omni Research and Training, 2015) and processes used by Sharma, Lopez, Mekiana, Ctibor, & Church

(2013). The focus group questions were informed by the key structural components outlined in Table 3.4 (Charmaz, 2006; Charmaz & Belgrave, 2012).

Table 3.4
Structure for Focus Group Question Guide

Section	Interview structure
Initial Section	Open-ended to facilitate non-prompted and unanticipated themes. Prompted participants to provide an open and nuanced understanding of their perception of OBOT success.
Intermediate Section	Directed questions to focus the interview and collect missing data about OBOT success.
Closing Questions	Positively framed questions to increase participants' comfort. The second to last question asked if there was "something" more the participant might add. This allowed room for more detail instead of abruptly closing the dialogue.
Post-interview Debriefing	Empowerment-based debriefing: recapped the interview, highlighted the importance of the participants' contributions, discussed potential implications (such as providing insight to treatment providers, researchers, and evaluators), and asked what participants hoped would come from the study. Two close-ended questions to assess how the participant felt after, compared to when they began, the interview (DeCou, Skewes, Lopez, & Skanis, 2013).

The procedure for collecting focus group data was interactive and collaborative. Focus group questions were developed using an open-ended and collaborative structure to balance the needs of addressing the research questions while still capturing the participants' perspective

outside of what was queried (Charmaz & Belgrave, 2012). Additionally, an "All-on-the-wall" (Sharma et al., 2013) procedure was used to encourage participants to co-interpret and analyze data as it was collected. The focus group questions and "All-on-the-wall" procedures are detailed in Appendix D.

To answer the study's research questions, three blocks of questions were posed during the focus group. The first question block queried participants' definitions of success and recovery, and responses were recorded on a flip chart. The second question block queried factors related to treatment success, including facilitators and barriers. Participants were asked to write down their thoughts about what contributes to "feeling successful" in treatment on yellow sticky notes, and their thoughts about what contributes to "not feeling successful" in treatment on green sticky notes. They were then asked to share their responses, collaboratively sort the sticky notes into groupings (domains), and name each identified domain. Figure 3.2 includes two photos to illustrate how the sticky notes were assembled into domains. The third question block queried participants' beliefs about how OBOT success should be measured. Responses were collaboratively discussed.

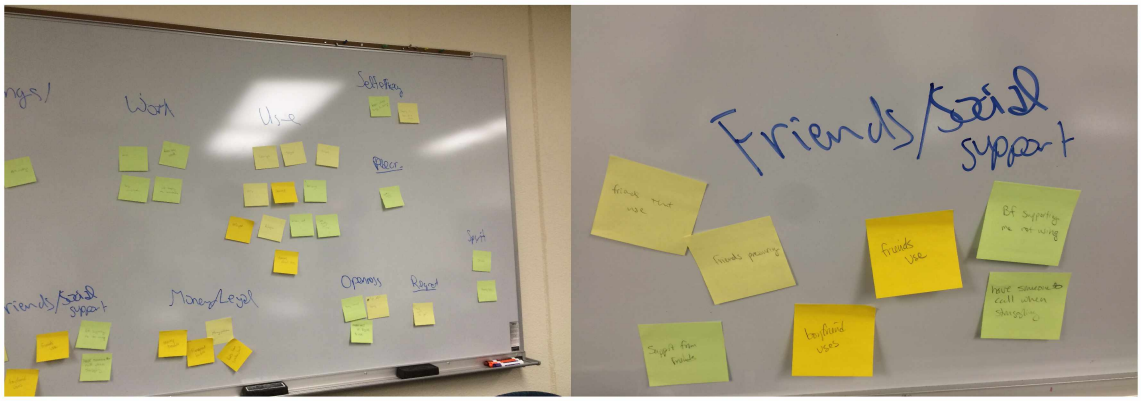

Figure 3.2. Participant-Created Domains from Pilot. Although the specific responses are not visible, these two images depict a visual representation of how participants' responses were sorted into domains using the "All-on-the-wall" procedure.

Professional advisors, researchers, and individuals who did not have a background in substance misuse research or treatment reviewed the study protocol to encourage comprehensiveness and accessibility of the instrument. In addition, three PhD students with clinical experience working with people with substance use disorders pilot tested the focus group process. Outcomes from the pilot-test included omitting items that were deemed unnecessary (e.g., "When I say the word success, what comes to your mind? What words, images, and connections come up for you?"), and rewording other items to enhance clarity (e.g., changing "How do treatment providers define recovery? How is this the same, or different, than your understanding?" to "How did you come to define success and recovery like this? [prompt: providers, family, support groups, friend]"). Pilot-testing also determined the focus group procedures to be feasible.

Phase II: In-depth, semi-structured telephone interviews. After the focus group was conducted and data were analyzed, it was determined that the same interview questions should be asked during the Phase II interviews. However, specific probes were added to further explore themes and domains that emerged from the Phase I focus group (Charmaz, 2006; Glaser & Strauss, 1967).

Conducting the focus group. Potential participants were screened for eligibility by Ms. Schoenberger. They were then invited to participate in the focus group, which was conducted at Sunshine's clinic in Willow, Alaska. The focus group comprised three stages: (1) welcoming and study orientation, (2) break and decision to sign the Informed Consent Form, and (3) data collection.

Stage one. Individuals were welcomed with light refreshments and offered two copies of the Informed Consent Form. I oriented the group with an opening script (see Appendix D),

which outlined the purpose of the study. The Informed Consent Form was read aloud and questions were answered. It was emphasized that disclosing illegal activities such as drug use would not warrant breaking confidentiality.

Stage two. Individuals took a brief break during which they could either decide to sign the Informed Consent Form and remain for the focus group or refrain from participating and leave before the focus group began. Individuals still interested in participating in the study were asked to sign the Informed Consent Form, return it to me, and keep a second copy for their records.

Stage three. Data collection involved participants completing the demographic survey (see Appendix C), establishing ground rules for the focus group (see Appendix D), and taking part in the focus group discussion. I facilitated the group during which probes and follow-up questions were used to refine the participants' understandings of success (Charmaz & Belgrave, 2012). During the focus group, Mr. Cartagena recorded copious notes based on behavioral observations using Onwuegbuzie, Leech, and Collins (2010) strategies for behavioral and nonverbal communication.

After Stage I data were collected, researchers and participants engaged in an empowerment approach to debriefing. This involved recapping the focus group discussion, highlighting the importance of the participants' contributions, discussing potential implications (such as providing insight into how success can be measured in Suboxone® treatment), and asking what participants hoped would come from the study. Finally, participants were asked two close-ended questions to assess how they felt after, compared to before, taking part in the focus group. In another qualitative interview study that entailed participants discussing past traumas involving a loved one's suicide or suicide attempt (DeCou et al., 2013), these debriefing questions revealed

participation in the study had a therapeutic effect. As participants left the focus group, they were offered a resource sheet (see Appendix F).

Conducting the telephone interviews. Ms. Schoenberger advised that travel costs would be a major barrier to participation and engagement for the patients in the Sunshine OBOT. Therefore, I conducted Phase II interviews via telephone to reduce travel costs and other obstacles to participation. After potential participants were identified based on the theoretical sampling process, Ms. Schoenberger provided the contact information for individuals who were interested in conducting an interview. Ms. Schoenberger provided potential participants with a copy of the Informed Consent Form, or I provided them with an electronic copy of the Informed Consent Form.

Prior to initiating an interview, I described the study, read through the Informed Consent Form, and emphasized that disclosing illegal activities such as drug use would not warrant breaking confidentiality. Each individual's oral consent was captured on the audio-recording. This process of obtaining verbal informed consent was successfully accomplished by Gifford (2013) who conducted telephone interviews with rural behavioral health care providers. I then conducted a telephone administration of the demographics survey previously described, and concluded with conducting the semi-structured interview.

The telephone interviews were completed using a conversational manner to increase flexibility, and to build rapport (Bazeley, 2013; Charmaz & Belgrave, 2012; Morrow, 2005). Consistent with constructivist grounded theory, I drew from themes that emerged during Stage I, while also remaining flexible in terms of exploring new and emergent topics (Charmaz, 2006; Charmaz & Belgrave, 2012; Doody & Noonan, 2013). After completing the telephone interview, I debriefed with participants and offered them an electronic version of the resource sheet

(debriefing procedures included in Appendix F). Ms. Schoenberger also made hard copies of the resource sheet available at Sunshine for individuals who may not have had Internet access.

Conducting the findings forum. To verify the findings from Phases I and II, this study used grounded theory techniques of member checking (Charmaz, 2006) while adhering to CBPR values such as shared ownership (Israel et al., 2001; Kemmis & McTaggart, 2005) to conduct a findings forum. After all of the data were collected and analyzed by researchers, a preliminary presentation of findings was developed for study participants. All participants were contacted to invite them to the findings forum. Eligible findings forum participants were those who had: (a) completed Phase I and/or II, and (b) indicated that they were interested in participating in the findings forum on their Phase I or II Informed Consent Form. Participants who could not attend a forum were offered an electronic copy of the presentation (PowerPoint) and the opportunity to discuss the findings individually with me.

Due to geographic constraints, I conducted the findings forum via conference using a secure computer connection in a private setting that connected with Sunshine's telebehavioral technology equipment. The Sunshine program director, Ms. Cici Schoenberg, approved this approach to facilitate the forum.

We used *Meeting to Go*: an Internet meeting forum that provided a secure connection (e.g., end-to-end encryption, strong passwords). The findings forum was conducted in four stages: (1) welcome, (2) presentation, (3) discussion, and (4) closing.

Stage one (welcome). Participants were welcomed to the findings forum by reintroducing them to the purpose of the study and their involvement in the study (e.g., participation in the focus group or in an interview). The importance of confidentiality was established and participants were reminded of how the study protects their privacy. Specifically, participants

were reminded that we would not disclose their identity unless there was an indicated threat to themselves or others and that findings will only be reported in aggregate form. Additionally, the purpose of the findings forum—to present and verify findings—was accentuated. During this stage, Ms. Schoenberger welcomed participants and provided them with a hard copy of the findings forum Informed Consent. In addition to signing the consent form, participants were asked to give their verbal consent. During a brief break, individuals were given the opportunity to decline participation and leave the forum. Nobody chose to leave.

Stage two (presentation). The findings of the study were presented to participants. Participants were given a handout of the PowerPoint presentation (see Appendix M). They were encouraged to take notes to denote findings with which they agreed, disagreed, or wanted clarification.

Stage three (discussion). Participants were invited to share their reactions to the findings and engage in a discussion about the presentation. This provided a means for verifying findings via member checking (Charmaz, 2006). To guide the discussion, participants were asked to share how they wanted to see the findings used, and to determine if and how they wanted to initiate an action plan (Israel et al., 2001; Kemmis & McTaggart, 2005). Specific discussion questions are provided in Table 3.5.

Stage four (closing). At the end of the findings forum, I summarized what was discussed. Participants were also provided the opportunity to debrief and process their experience in the findings forum. To thank participants for their time and compensate them for travel expenses, they were offered a $20 gift card to a local grocery store (given to them by Ms. Schoenberger).

Table 3.5
Findings Forum Questions

Stage	Questions
Stage III. Discussion	1) What are your general impressions of the findings? 2) What was most interesting? Did anything surprise you? 3) Are there findings you may not agree with and would like to clarify? 4) Are there findings you particularly agree with and would like to highlight? 5) How would you like to use this research? 6) How did you feel about this method? If you were a part of the original focus group, how did you feel about the process of using the sticky-notes?
Stage IV. Closing	1) How helpful was it to hear other people's stories? 2) How was it to participate in this forum using distance technology?

Data Analysis

Demographic survey management and analysis. Completed demographic surveys were coded and entered into an excel document for descriptive statistical analysis. Continuous variables (e.g., age, length of opioid misuse) were analyzed for mean, median, mode, standard deviation, and range, while categorical variables (e.g., "Please rate your current health") were analyzed to examine frequencies. I did not explore relationships or differences between variables (e.g., using ANOVA) because of the small sample size.

The qualitative items (e.g., "What is/was your opioid of choice") that yielded quantifiable responses were quantified and analyzed as categorical variables using descriptive statistical analyses, that is, frequencies. Qualitative items that yielded rich and varied responses (e.g.,

"Why do you feel like you are or are not in recovery?") were analyzed using directed content analysis. All demographic survey analyses are reported in an aggregate format that describes participants as a group.

Approach to qualitative analysis. As previously described, inductive and deductive qualitative analysis approaches were used. Since I have a background in substance abuse research and clinical work, a deductive approach of directed content analysis was used to frame a priori knowledge and assumptions (Hsieh & Shannon, 2005). To balance the constraints of a deductive approach, analysis maintained a theoretically sensitive stance to encourage openness to emergent data (Charmaz, 2006; Glaser & Strauss, 1967; Kelle, 2007). A second researcher, Mr. Cartagena (who had no formal background in substance abuse research) assisted with data collection and analysis, and with avoiding an unintentional push towards already established, "pet theories" (Kelle, 2007). Both researchers openly discussed their biases and assumptions throughout the study, including during data analysis. Finally, as recommended by Strauss and Corbin (1990), a theoretically sensitive stance was encouraged by: (a) taking a step back from the data to reflect, (b) remaining skeptical and inquisitive, and (c) sticking to the research protocol. As analysis moved toward data saturation, researchers took a flexible, thoughtful, community-informed (e.g., by conducting the findings forum), and data-grounded approach in efforts to avoid premature foreclosure of categories (Charmaz, 2006).

Exploring the data. To explore the qualitative data, analysis included a preliminary analysis, theoretical sampling, and finally a comprehensive analysis. Data included transcripts created from audio-recordings of the focus group and interviews, visual diagrams of participant-defined categories that emerged during the focus group, behavioral observations documented during the focus group, and notes recorded during data collection sessions.

Preliminary analysis. Adhering to the principles of CBPR (Israel et al., 1998; Israel et al., 2001), focus group participants were regarded as co-researchers who interpreted and verified the analysis as data were collected (Sharma et al., 2013). After the focus group, photos were taken of the "All-on-the-wall" (see Appendix D) procedure to capture participant-generated findings as one form of data. In addition, the audio-recorded focus group was transcribed. Using these sources of data, researchers conducted a preliminary analysis using initial coding (described next).

Specifically, we started broadly by developing codes that closely represented the data (in this study, the categories initially developed by focus group participants during the All-on-the-wall procedure; Charmaz, 2006). Initial coding was also used to capture ideas that were discussed in other stages of the focus group. Progressively, we scrutinized and explored the relationships between identified or emerging categories (Draucker et al., 2007; Kelle, 2007). Codes that were symbolic markers of the language participants used (in-vivo codes) were used to represent the meaning of participants' perspectives (Charmaz, 2006). In-vivo codes were derived from participant-defined categories that emerged during the focus group and from reviewing the transcripts. Then, we used selective coding, diagrams, and theme-development to begin moving the initial codes towards broader categories (Charmaz, 2003, 2006). At this stage, individuals were theoretically sampled for telephone interviews based on themes that required deeper exploration (Draucker et al., 2007).

Theoretical sampling. Conducting the initial and selective coding of the focus group transcript created a snapshot of the data. The researchers then examined the emergent themes to identify those requiring expansion and clarification. Subsequently, theoretical sampling was conducted in an effort to elaborate meaning, discover variation, identify gaps, and reach

saturation (Charmaz, 2006; Patton, 2002). Mixed purposive sampling techniques guided the theoretical sampling decision-making process. For example, typical cases emerged from the focus group, such as people who were doing well and were in the "advanced group." In response, the researchers decided to sample atypical cases to gain a different perspective, such as people who were struggling in the group, and those in the "beginner group").

Comprehensive analysis. Telephone interview recordings were transcribed to become raw data for data analysis. The coding process involved a progression that moved understanding from discrete and literal (initial coding), to conceptual and abstract (selective coding), to a higher level of abstraction and relational representation of the data (theoretical coding). After all of the data from Phases I and II were collected and coded, theoretical coding was conducted to "weave the fractured story back together" (Glaser, 1978, p. 72). That is, theoretical coding relied on selective coding to develop categories that subsumed initial codes in efforts to develop an analytic framework (Charmaz, 2003).

Categories *earned their way* into the analysis (Charmaz, 2006) through emerging from the constant comparison method (Draucker et al., 2007). The constant comparison method enabled the following comparisons: (a) data/categories between people, (b) the same person at different points during the focus group and/or telephone interview, (c) incidents with other incidents, (d) data with categories, (e) categories with other categories, and (f) the team-based codebook with emerging data. Nvivo[10] software (described below) is a qualitative data management and analysis software program that facilitated the constant comparison method. For example, through running Nvivo[10]queries, nodes (codes) were compared, and visual models of the data were created (Bazeley & Jackson, 2013).

Organizing the data. The process of memo writing, developing a codebook, and using Nvivo[10] software program was employed to organize the data. Data were securely stored in accordance with the Institutional Review Board protocol.

Memo writing. To increase trustworthiness of theoretical sampling and the constant comparison method, informative memos were written and curated. Memos were written during and after data collection (focus group and telephone interviews), meetings with Ms. Schoenberger and researchers, data analysis and synthesis, and draft paper writing to abstractly develop and analyze data, categories, and concepts (Bryant & Charmaz, 2007).

Codebook. Glaser and Strauss (1967) suggest that analytic codes should emerge from the data, not from a deductive or preconceived assumption about the theory. Nevertheless, Strauss and Corbin's (1990, 1994) approach to grounded theory allows for a less fundamentalist and more pragmatic approach to analysis. An a priori codebook (see Appendix G) was developed per the literature. The primary purpose of this codebook was to frame researchers' expectations, biases and assumptions. This a priori codebook was compared with those codebooks that were later developed based on the data collected from participants.

Nvivo[10]. Nvivo[10], a software program for qualitative data analysis (Nvivo[10] for Mac, 2015), was used to store, organize, and analyze qualitative data, including transcripts, pictures, notes, and codebooks. An audit trail comprising memos and notes from meetings were also stored in this program.

Rigor

Qualitative research ascribes to a different standard from quantitative research for establishing rigor or trustworthiness. In this study, criteria for trustworthiness as identified by Morrow (2005) was established in the manner described in Table 3.6.

Table 3.6
Establishing Trustworthiness

Rigor criteria	How it was established
Credibility	Definition: Similar to "internal validity" in quantitative research. Refers to the communication of internal rigor in the research process. Application: This study used participants as peer-investigators during the focus group, theoretically sampled for negative cases, conducted a findings forum where participants co-interpreted findings, and remained reflexive.
Transferability	Definition: Similar to "external validity" in quantitative research. Refers to how far the findings of a qualitative study can be generalized. Application: Researchers provided detailed information about the researchers, the instruments, the context, and the participants to increase the opportunity for transferability of study findings to other settings.
Dependability	Definition: Similar to "reliability" in quantitative research. Refers to having a systematic plan that can lead to study replication. Application: Study design applied "planned flexibility" (Bazeley, 2013, p. 31) through a detailed, systematic plan using a protocol, a codebook, diligent memo writing, and directed content analysis approach.
Triangulation	Definition: The process of taking multiple perspectives. Application: Study used various investigators (professional advisor, two coders), methods (inductive grounded theory approach and deductive directed content analysis), and multiple sources of data (notes from professional advisors, focus group, telephone interviews, and the literature). Participants were encouraged to verify findings, or "member check" (Charmaz, 2006; Israel et al., 1998).
Praxis	Definition: Integrating practice with theory (Patton, 2002). Application: Study aimed to expand upon existing knowledge of success in substance abuse treatment in a practical way based on the perspectives of the patients.

Table 3.6 continued

Verstehen	Definition: Obtaining a deep understanding of study findings. Application: Gained a broad focus (with a focus group) and then obtained in-depth perspectives via the telephone interviews.
Dialogue	Definition: Mutually constructed theory based on multiple perspectives. Application: Study intended to encourage dialogue through adhering to a CBPR approach, specifically via collaborative involvement from Ms. Schoenberger and study participants throughout the study.
Context, Culture, and Rapport	Definition: "Recontextualizing" participants' experiences. Application: Attention paid to building rapport while being cognizant of the "slippery slope" of blending research with clinical practice. Ms. Schoenberger oversaw process and facilitated entry into the treatment culture.
Reflexivity, Representation, and Fairness	Definition: The process of explicating inherent biases through acknowledging the subjective nature of research and striving to accurately represent participants' perspectives. Application: Researchers explicated their assumptions and backgrounds, and explored them throughout the study. Diverse perspectives included in the research team. The team remained flexible to the needs of stakeholders, reflexive throughout data collection, followed the lead of participants, and remained theoretically sensitive during data analysis (Bazeley, 2013; Charmaz, 2006). Member checks during Phases I and III encouraged accurate representation of the findings.
Consequential Validity	Definition: Building the capacity for social and political change. Application: Adhered to CBPR principles to enhance the relevance and usefulness of the data, create rigor by using local knowledge and practical social experiences, bridge cultural gaps by engaging and empowering marginalized populations, and improve the well-being of communities through the strength-based approach which encourages participant buy-in (Israel et al., 1998).

Chapter 4: Findings

Findings from this study will be discussed based on descriptive analysis of participants' responses to the demographic survey and qualitative analysis of the Phase I focus group, Phase II interviews, and Phase III findings forum. The categories that emerged during the initial focus group, during which participants developed categories related to their definitions of success, were further clarified and revised through conducting subsequent in-depth interviews. Findings that emerged through the qualitative analysis were discussed and clarified during a findings forum. The findings presented below are based on the final analysis that integrates data from the focus group, in-depth interviews and findings forum. Appendix L includes three analysis tables providing detail about how the analysis evolved from the focus group through the subsequent interviews and findings forum.

Descriptive Analysis

After consenting to the study, participants completed a demographics questionnaire, which included questions about their health, addiction, treatment experience, and recovery. Table 4.1 details participants' health, wellbeing and opioid use ratings, including frequencies and the mean, standard deviation, and ranges when applicable.

Table 4.1
Health, Wellbeing, and Opioid Use

	FG n (%)	Interviews n (%)	Total N (%)
Health and Wellbeing			
Current Health			
Physical Health			
Fair/Poor	1 (14%)	1 (14%)	1 (8%)
Good/Very Good/Excellent	6 (86%)	6 (86%)	11 (92%)
Mental Health			
Fair/Poor	0 (0%)	1 (14%)	1 (8%)
Good/Very Good/Excellent	7 (100%)	6 (86%)	11 (92%)
Spiritual Wellbeing			
Fair/Poor	1 (14%)	0 (0%)	1 (8%)
Good/Very Good/Excellent	6 (86%)	5 (71%)	9 (75%)
Not Applicable	0 (0%)	2 (29%)	2 (17%)
Social Functioning			
Fair/Poor	1 (14%)	2 (29%)	3 (25%)
Good/Very Good/Excellent	6 (86%)	5 (71%)	9 (75%)
Current Psychological Concerns			
Depression	2 (29%)	1 (14%)	3 (25%)
Anxiety	0 (0%)	3 (43%)	3 (25%)
Stress	1 (14%)	1 (14%)	2 (17%)
None	5 (71%)	3 (43%)	5 (71%)
Current Health Concerns			
Breathing	3 (43%)	2 (29%)	4 (33%)
Chronic Pain	1 (14%)	4 (57%)	4 (33%)
None	2 (29%)	3 (43%)	4 (33%)
Arthritis	2 (29%)	0 (0%)	2 (17%)
Liver/Kidney	2 (29%)	1 (14%)	2 (17%)
Abscesses/Collapsed Veins	1 (14%)	1 (14%)	2 (17%)
High Blood Pressure and Smoking	2 (29%)	0 (0%)	2 (17%)
Heart Health	1 (14%)	1 (14%)	1 (8%)
Infectious Disease	1 (14%)	1 (14%)	1 (8%)

Table 4.1 continued

	FG n (%)	Interviews n (%)	Total N (%)
Opioid Use			
Introduction to Opioids			
Prescribed by Doctor	6 (86%)	6 (86%)	10 (83%)
Fun/Enhance Mood	4 (57%)	6 (86%)	9 (75%)
To get "High"	4 (57%)	6 (86%)	9 (75%)
To Manage Pain	5 (71%)	6 (86%)	9 (75%)
To Cope with Stress	4 (57%)	5 (71%)	8 (67%)
To Escape Something Negative	4 (57%)	4 (57%)	7 (58%)
To Cope with Psychological Issue	3 (43%)	4 (57%)	6 (50%)
Because they were Available	3 (43%)	4 (57%)	6 (50%)
To Fit In	3 (43%)	2 (29%)	4 (33%)
To Cope with Certain Social Encounters	0 (0%)	1 (14%)	1 (8%)
Opioids Used			
Medication-assisted Treatment (as prescribed)	7 (100%)	7 (100%)	12 (100%)
Prescription Opioids (not as prescribed)	7 (100%)	6 (86%)	11 (92%)
Heroin	5 (71%)	6 (86%)	10 (83%)
Prescription Opioids (as prescribed)	6 (86%)	5 (71%)	10 (83%)
Methadone (not as prescribed)	6 (86%)	5 (71%)	9 (75%)
Morphine (not as prescribed)	5 (71%)	4 (57%)	8 (67%)
Medication-assisted Treatment (not as prescribed)	3 (43%)	3 (43%)	6 (50%)
Morphine (as prescribed)	2 (29%)	2 (29%)	3 (25%)
Methadone (as prescribed)	1 (14%)	0 (0%)	1 (8%)
Opioids of Choice			
Prescription Opioids	5 (71%)	3 (43%)	6 (50%)
Heroin	3 (43%)	4 (57%)	6 (50%)
Methadone	1 (14%)	1 (14%)	2 (17%)
Preferred Route of Administration			
Intravenously	2 (29%)	4 (57%)	5 (42%)
Orally	2 (29%)	2 (29%)	3 (25%)
Multiple Routes	3 (43%)	0 (0%)	3 (25%)
Smoking	0 (0%)	1 (14%)	1 (8%)

Health and wellbeing. Regarding current health, most participants described their health as good, very good, or excellent with regard to their physical (91%), mental (91%), spiritual (75%), and social health/functioning (75%). Current psychological concerns reported included depression (25%), anxiety (25%), and stress (17%), while the most common current health concerns included breathing (33%), and chronic pain (33%).

Opioid use. All of the participants reported experiencing withdrawal symptoms at some point, and also considered their opioid use problematic or addictive at some point. Participants reported that their average length of addiction ranged from 2-20 years ($M = 9$, $SD = 5$), while average length of recovery ranged from 2 to 108 months ($M = 38.25$, $SD = 32.8$), that is zero to nine years.

Participants reported origins or reasons for beginning to use opioids and the types of opioids used are listed in Table 4.1. Most participants were introduced to opioids by their doctor (83%), and used to enhance their mood (75%), to get high (75%), to manage pain (75%), to cope with stress (67%), and/or to escape from something negative (58%). The primary opioids that were used include medication-assisted treatment, as prescribed (100%); prescription opioids, not as prescribed (92%) and as prescribed (83%); and heroin (83%). Half of the participants reported having used medication-assisted treatment, not as prescribed.

Participants' reported opioids of choice included: prescription pills such as oxycodone, tramadol, codeine, and oxymorphone (58%), heroin (50%), or methadone and/or methadone/morphine, (17%). In terms of preferred methods for taking opioids, 42% preferred taking opioids intravenously, 25% preferred taking opioids orally, 25% preferred multiple routes of administration, and 8% preferred smoking/inhalation.

Table 4.2
Current Substance Use and Goals

	Focus Group		Interviews		Total	
	Current	Goals	Current	Goals	Goals	Current
	n (%)	n (%)	n (%)	n (%)	N (%)	N (%)
Nicotine						
No Use	2 (29%)	7 (100%)	3 (43%)	6 (86%)	11 (92%)	4 (33%)
Moderate/Controlled	4 (57%)	0 (0%)	2 (29%)	1 (14%)	1 (8%)	5 (42%)
Unrestricted/Heavy	1 (14%)	0 (0%)	2 (29%)	0 (0%)	0 (0%)	3 (25%)
Alcohol						
No Use	7 (100%)	7 (100%)	4 (57%)	4 (57%)	9 (75%)	9 (75%)
Moderate/Controlled	0 (0%)	0 (0%)	3 (43%)	3 (43%)	3 (25%)	3 (25%)
Unrestricted/Heavy	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Marijuana						
No Use	7 (100%)	7 (100%)	6 (86%)	5 (71%)	10 (83%)	11 (92%)
Moderate/Controlled	0 (0%)	0 (0%)	1 (14%)	2 (29%)	2 (17%)	1 (8%)
Unrestricted/Heavy	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Opioids (not Suboxone®)						
No Use	7 (100%)	7 (100%)	6 (86%)	7 (100%)	12 (100%)	11 (92%)
Moderate/Controlled	0 (0%)	0 (0%)	1 (14%)	0 (0%)	0 (0%)	1 (8%)
Unrestricted/Heavy	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Stimulants						
No Use	7 (100%)	7 (100%)	6 (86%)	7 (100%)	12 (100%)	11 (92%)
Moderate/Controlled	0 (0%)	0 (0%)	1 (14%)	0 (0%)	0 (0%)	1 (8%)
Unrestricted/Heavy	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Current substance use and goals. Current use and goals related to substance use are reported in Table 4.2. Some participants were still moderately using substances, and a minority of participants had the goal of moderate use of some substances, such as marijuana, alcohol, and nicotine. None of the participants had a goal of heavy/unregulated use of any substance, or of any use of stimulants or opioids (excluding Suboxone®).

Regarding current Suboxone® treatment, 50% were in the Sunshine Clinic's advanced group (a minimum of 6 months of abstinence, evidence of recovery thinking, and compliance with the program), 42% were in the beginner group (did not qualify for the advanced group), and 8% were in the individual group (met criteria for the advanced group but are not able to attend). None of the participants considered themselves to be in active addiction at the time of the study, and all of the participants considered themselves to be in recovery. Participants' reported believing they were in recovery due to cessation of substance use disorder (SUD) symptoms (e.g., reduction in relapse, cravings, and heroin addiction), their ability to function, and having motivation to be in treatment. For example, one participant stated, "While on Suboxone®, you are able to be a fully functioning member of society and as long as I'm on Suboxone® everything is fine with no to minimal danger of relapse" (Participant [P]7). Participant five described how stability and progress contribute to feeling like they are in recovery:

> *I am at a really good place in my life right now. I have been sober for a very long time. Everything in my life seems to keep getting better and better. I have a good job, I graduated college. I have strong/healthy relationships.*

Qualitative Findings

The qualitative findings will be described in terms of a hierarchy of broader categories, descriptive themes, and subsumed concepts. For ease of reference, **categories** are bolded, <u>themes</u> are underlined, and *concepts* are italicized. The four overarching **categories** were established based on the research questions (see p. 8): **Success**, **Recovery**, **Facilitators & Barriers**, and **Measurement** of Success. <u>Themes</u> represent the salient groupings of data that characterize each category. *Concepts* provide more detail and context, and help tell the story of each theme.

Analyses of the categories are presented in the following sections, including: definitions of categories and affiliated themes and concepts, frequency of endorsement, and the number of interview participants endorsing each theme. It should be noted that although providing the frequency of endorsement is not common practice in qualitative research, it is in accordance with the directed content analysis approach used in this dissertation (Curtis et al., 2001; Hsieh & Shannon 2005). Additionally, this enables the reader to recognize the most referenced content and adds transparency to the analytical process.

The final section of this chapter (see Participants' Experiences of being in the Study) focuses on how participants felt about participating in the study. This section also introduces a metaphorical, integrated conceptual model of the cumulative findings. The model emerged during the Phase I focus group, and continued to become refined during the Phase II interviews and analysis process. The following section describes the success category and associated themes and concepts.

Success. Success, which includes participants' definitions of success, was the category that participants discussed with highest frequency. Analysis revealed four primary themes within success, including: lifestyle, accomplishments, relationships, and psychological factors. Table 4.3 provides definitions, frequencies, and data collection sources for each theme and concept comprising the category success. Although all themes and concepts were referenced in the focus group, concepts that were specifically named by participants during the focus group All-on-the-wall procedure are represented with (^{a}). A table of initial themes identified and named by participants during the Phase I focus group is provided in Appendix 5.K-1.

Table 4.3
Themes and Concepts Related to Success

	No. ref.	No. interviews
Lifestyle	99	7
Functional Lifestyle [a]	45	7
Fulfilling responsibilities; functioning in work/school		
Living a healthy and sustainable lifestyle (e.g., taking care of self)		
Cessation of Substance Use Disorder (SUD) Symptoms	37	7
Reducing symptoms related to substance disorder (e.g., withdrawal, stealing, cravings, tolerance, drug-seeking)		
Living Life	17	5
Living life to the fullest		
Seeing contrast to life when using (e.g., numbing)		
Accomplishing	60	7
Progress [a]	37	6
Making "small successes" and moving toward goals		
"Bettering yourself" and reappraisal of life goals		
Seeing past to present difference in regards to progress		
Self-efficacy	24	5
Believing one can manage life; learning to cope/deal with life		
"Doing it for myself"		
Relationships	59	5
Family [a]	34	5
Referring to family and close relationships/significant others		
Restoring Relationships	15	5
Making amends; healing lost social connections		
Social Functioning [a]	10	3
Improving social relationships		
Ending relationships that did not foster success/social functioning		
Psychological	46	6
Emotional Wellbeing [a]	18	6
Feeling happiness, peace, self-esteem, self-worth		
Mental Health [a]	15	3
Recovering from mental health symptoms (e.g., depression, anxiety)		
Having a clear head and better decision-making process		
Character	13	5
Feeling like a "new person"; being more open and honest		

[a] *Concepts that were also identified by participants in the focus group.*

Lifestyle. Lifestyle emerged as a prominent theme of success that included concepts of having a *functional lifestyle, cessation of SUD symptoms,* and *living life* (to the fullest). This theme incorporates how one lives day-to-day and how daily lifestyle behaviors relate to success.

Participants described living a *functional lifestyle* when describing success. This concept emerged during the focus group, and was further elaborated upon during subsequent interviews. Participants believed they were functional when they were able to contribute to society and do "normal" things. For example, participant nine described how success includes living a sustainable lifestyle:

> *...things like going to work and keeping a regular schedule and paying bills. Maintaining a safe place to stay. Being able to keep possessions that are necessary to maintain a lifestyle, like a car or work equipment...and sustainable lifestyle.*

Another theme of living a successful lifestyle described by participants during the focus group and interviews was *cessation of SUD symptoms*. Although participants referenced reduction in symptoms, such as cravings (e.g., "I don't have any cravings or anything", P5), most participants also described behavioral changes, such as a reduction in drug seeking. For example, one participant described how Suboxone® relieves behavioral symptoms of SUD by noting, "with Suboxone®, you take it and… I'm not always chasing drugs like I was before. That stopped" (P3). Likewise, another participant shared, "I'm not constantly looking for some way to feel better and I'm not going about the wrong things to get that" (P11).

A final theme emerging within lifestyle was *living life.* This involved doing and experiencing things that were not experienced before, such as actively engaging in relationships (as opposed to being a "warm body", P2), going on vacation, practicing self-care, and not

"numbing" themselves like they did in active addiction. One participant described how success means being more emotionally present and engaged in life by stating, "Now when I cry I'm actually crying because I'm hurt. When I'm happy, I'm not just crying to fit the emotion that's going on around me" (P4). This same participant also stated, "...before…it was just day to day, and now I *live* everyday" (P4). Finally, participant ten described how *living life* involved having a sense of purpose:

> *Doing drugs like that, when you're lost, it will give you a sense of purpose. Like, oh I got something to do today… And especially in Alaska, people get bored and what not… but like, when I'm on Suboxone®, that gives me like…it kind of fills it… I'm trying to get into this school… But even when I'm sitting at home alone all day, it gives me more of a sense of purpose…it makes me feel better about myself than going and running around and playing the game.*

Accomplishing. When defining success, participants discussed the theme of accomplishing things. Two concepts (reported in Table 4.3) comprising accomplishing included *progress* and *self-efficacy.*

Progress was the most frequently endorsed concept of accomplishing. One participant aptly demonstrated the growth component of *progress* by explaining, "I think there's this growth in every way. Everything I do every day is showing something successful" (P6). For another participant, *progress* was "Bettering Yourself", or the notion that success involved some degree of becoming a better version of oneself. Notably, this was so relevant to focus group participants that they referenced Bettering Yourself as a theme during the All-on-the-wall procedure, which was later integrated into the *progress* concept. Thus, accomplishing is in part

demonstrated by making *progress* towards one's goals and growing into a better version of oneself.

While *progress* described the active changes participants were making in their lives and the momentum required to make these changes, another concept, *self-efficacy*, related to intrinsic beliefs related to one's motivation and ability to change. Participant ten discussed their experience of self-efficacy:

> *I know in my head right now, a week from now, I'm not going to be screwed up…I don't want to be screwed up on the street doing drugs again. I know right now. I trust…I trust myself more. I trust myself when I'm on Suboxone® more, as of right now. In a year from now, I'll trust myself without.*

As demonstrated above, *self-efficacy* related to a sense of trust and believing in oneself. It also related to what drives participants to change, which tended to include intrinsic, versus extrinsic, motivators. One participant notably illustrated how important an intrinsic motivation to change is when they suggested, "For me for success I had to do it for myself finally. Because I tried it for everybody else and it never worked that way" (P3). These intrinsic processes emerged as being important for participants to be able to make progress toward their goals.

In sum, one participant particularly captured the accomplishing theme when they stated: "I am able to accomplish the things that I want to and direct the course of my life" (P9). This encompasses a belief in being able to accomplish things, as well as a focus on progress.

Relationships. Participants identified relationships with *family*, the process of *restoring relationships*, and *social functioning* as concepts of success in Suboxone® treatment (reported in Table 4.3). *Family* was by far the most referenced relationship concept noted by participants during both the Phase I focus group and Phase II interviews, suggesting it plays an important role

in how they define success in Suboxone® treatment. For example, one participant shared how treatment success contributed to better relationships: "Just having better relationships in general. Number one, my kids, my family, gaining all that trust back and everything really started with group and being on Suboxone® and being in recovery" (P2).

Another relationship concept of success was *social functioning,* which was operationalized as being the ability to function socially and to have healthy social relationships. Participant ten explained how overcoming their addiction impacted their relationships:

> *[Treatment success has] improved [my relationships] obviously, because when you're a junkie not a lot of people want to be your friend. It's about keeping good company I guess. If you want to keep good company, then hang out with people that are successful.*

Finally, *restoring relationships* included participants' discussion of making amends and mending relational connections that were lost due to their addiction. Participants' endorsement of *restoring relationships* with *family* and *social functioning* commonly co-occurred, suggesting that treatment success facilitated a process of having healthier relationships. For example, participants discussed regaining custody of children, having closer emotional connections to family members, spending more time with family and friends, and having improved relationships because treatment success helped them to refrain from risky activities and behaviors associated with their addiction, such as stealing, lying, being emotionally disconnected.

Psychological. The psychological concepts of success elucidate the way thought-processes, emotions, and participants' sense of self changed in relation to recognizing their treatment successes. Psychological concepts that emerged from the focus group and interviews include *emotional wellbeing* (e.g., "feeling happy for no reason…where I was miserable before",

P6), *mental health* (e.g., "my mind is a lot more clear. I think more positively", P11), and *character* (e.g., "feel(ing) like a whole new person", P4). Additionally, the concept of *character* was described in the initial focus group as morality (e.g., "it's about that moral compass", P7).

Within the psychological theme, participants accentuated that success involved more than just the cessation of symptoms. One participant highlighted the importance of seeking treatment in order to heal psychologically to achieve success by describing their experience with people who were not psychologically healthy: "I mean you could have someone who's been sober for twenty years and they're mentally not there. They're mentally sick. Because they haven't seeked any help" (P6). Relatedly, another participant noted how they have been able to achieve psychological wellbeing after the cessation of opioid abuse by noting, "I no longer crave drugs or even desire them. I no longer need that to make me happy. I'm finding my happiness without them" (P3).

Beginner compared to advanced group membership. In addition to the analysis conducted to achieve study aims, an analysis was conducted to identify how definitions of success might differ between participants in the beginner and those in the advanced group. This analysis provides greater context to the themes that emerged from this study. Table 4.4 outlines the total number of references to themes of success (times each concept was endorsed by a participant, or group of participants as in the focus group) for participants in the beginner (42%, $n = 5$) and the advanced and independent (58%, $n = 7$) group. It should be noted that it would not be meaningful to determine the statistical significance of this comparison. This comparison was not the focus of this study, and participants were not invited to interpret possible reasons for any differences in theme endorsement found between the two groups. Nevertheless, interpretation of what may account for the variation between groups follows.

Table 4.4
Success References for Beginner versus Advanced Group

	Beginner	Advanced
Lifestyle		
Cessation of SUD	26	11
Functioning	22	23
Living Life	14	3
Accomplishing		
Progress	24	13
Self-efficacy	7	17
Relationships		
Family	20	14
Restoring Relationships	12	3
Social Functioning	5	5
Psychological Factors		
Character	9	4
Emotional Wellbeing	11	7
Mental Health	9	6

For the theme lifestyle, beginner group participants more often referenced *cessation of substance use disorder symptoms* and *living life* than those in the advanced or independent group. One possible reason for these differences is that those in the beginner group may place more emphasis on these concepts because these are new and salient to their experience of success. For instance, someone who is new to treatment may be feeling more successful due to the reduction in substance use disorder symptoms and the freedom to live life to the fullest that follows because these experiences are in stark contrast to their recent experiences in addiction.

Regarding accomplishing, participants in the beginner group had a greater number of references regarding *progress*, while those in the advanced/independent group more often

endorsed *self-efficacy*. Similar to the lifestyle concepts, it could be that those who are new to treatment experience success when they notice progress toward their goals, while those who have been in treatment for longer may find that having an internalized sense of their ability to continue reaching goals is more relevant for success.

Across the beginner and advanced groups, relationship concepts were similar or not drastically different regarding references to *family* and *social functioning*. However, beginner participants referenced *restoring relationships* more often than those in the advanced/independent group. Participants newer to treatment may find it more important to mend ruptures caused by their addiction. This may not be as important to those who have been in treatment for longer because they may have already mended important relationships.

Finally, there were not very dramatic differences between the two groups for psychological concepts. While *character* was referenced more often in the beginner group, the references were longer in the advanced group. That is, several individuals had a lot to say. As such, it appears that *character* was a salient concept across groups. It is possible that perceived changes in participants' character made them feel successful. Alternatively, perhaps participants believe character is an important factor in success because of what they have heard from others, including treatment providers and society in general.

Recovery. Participants defined **recovery** as embodying similar elements as success. Nevertheless, when describing their **recovery**, participants further described a process of healing/growth with a specific recovery attitude. Table 4.5 outlines the themes related to recovery. All themes were referenced by participants in the focus group and expanded upon in the subsequent interviews.

Table 4.5
Themes Related to Recovery

Themes	Conceptualization	No. references	No. interviews
Healing/Growth		43	7
	Holistic Healing (from the past)	17	6
	Growing into a better person		
	Overcoming difficulty/fears		
	Actively working on oneself		
	Living according to one's own values		
	Connecting with others		
	Having more freedom in life		
	Living life to the fullest		
Process		13	5
	Involving time, phases, stages		
	Reflecting on life - past, present, future		
Recovery Attitude		12	5
	Having a sense of peace re: life		
	Accepting oneself and others		
	Having a desire to change		
	Making the decision to change		

In contrast to success, which was described by participants in terms of measurable and observable outcomes and changes, participants described recovery as a healing and growth process. This understanding of recovery began to emerge during the Phase I focus group where participants endorsed healing and the notion that recovery is "more than" sobriety. Nevertheless, healing/growth does parallel the success concept of *living life* in that through the process of healing, participants are able to actively engage in life and live it to the fullest.

To illustrate the holistic properties of healing/growth, one participant stated: "I think it's a chain reaction of positive – it happens in your life because once you start remaining in recovery then your health gets better mentally, physically" (P6). This participant further shared their ideas about recovery as being, "A mental, physical, spiritual part of you that all comes in and somewhat works together."

Healing and growth were described as involving elements of one's self-development, and a connection with important people and forces in one's life. Participant eight shared their recovery goals related to a secure sense of self:

> *For me to be recovered... I would like to find a way to be confident or comfortable enough in myself to not have to get high... confident or comfortable enough in my own situation, my own family or whatever it is I got going on now.*

As demonstrated with this quote, participants described a path towards interpersonal and psychological growth. This parallels some elements of **success**, including relational and psychological themes. While success themes were often described in terms of noticeable changes, **recovery** themes appeared to involve a deeper level of awareness of change over time in terms of where one is today, how they have overcome adversity in the past, and where they want to be in the future. As participant 11 explained:

> *Basically recovering from all the wear and tear that you put on your body and your mental status and then success is more that you're actually doing what you're supposed to do and living your life for yourself*

Recovery was described as a process, including a progressive movement toward the healing/growth described above. One participant illustrated the developmental nature of recovery

by describing it as a, "transition between one lifestyle and the other…[with] a series of false starts" (P9).

In addition to the primary notion that recovery involves a healing/growth process, participants also described a specific recovery attitude, which included desire and decision to change. One participant exemplified the role of decision-making in recovery by stating, "Actually recovery starts when you make the decision to get healthy" (P4). Another participant concurred, stating, "You have to set your mind into it" (P3). Notably, a recovery attitude parallels the concept of *self-efficacy* in the accomplishing theme of success in that both involve making a decision to change.

Participants discussed recovery attitude as including a more balanced and acceptance-based orientation to the world. For example, one participant explained, "yah I am [at peace]. But it took time" (P3). While this is similar to psychological concepts such as *emotional wellbeing*, when discussing success, participants described observed changes that had occurred in their emotional state rather than focusing on the path it took to get there.

As indicated above, some of the recovery themes paralleled success themes and concepts including healing and growth as related to *living life*, and a recovery attitude as related to *self-efficacy* and *emotional wellbeing*. Nevertheless, participants were adamant that recovery and success were related, yet distinct, constructs. Perhaps the most prominent distinction of how these categories differ includes the notion that success precedes recovery. As noted by one participant, "Once you have success your recovery starts, you start healing emotionally, physically, mentally" (P3). This suggests that even though these categories parallel each other, they become distinct because of the longevity of recovery. Additionally, recovery was described as a deeper level of commitment as exemplified by this participant: "You've got to set your heart

into it, not just your mind" (P3). Finally, the *process* element of recovery is the most distinctive component, suggesting that recovery as a process might be an important defining characteristic of this category.

Facilitators and barriers. Three themes emerged from participants' discussions regarding what makes it easier and or harder to achieve success in Suboxone® treatment. These themes included treatment factors, contextual factors, and psychological factors. Table 4.6 outlines facilitator and barrier themes and concepts, all of which were also referenced in the focus group.

Table 4.6
Themes and Concepts Related to Facilitators and Barriers

Themes & Concepts	Facilitators	Barriers	No. ref	No. interviews
Treatment Factors			73	7
Psychosocial Treatment	Group, support, acceptance, valuing patients, encouraging accountability, being flexible	Feeling judged by providers, not patient-centered, having a mismatch between patient goals & treatment goals, treatment regulations/policies	46	7
Suboxone®	Increasing motivation, reducing cravings, and eliminating option to abuse opioids	Suboxone® contrasting with values; physical dependence to Suboxone®	35	7
Availability and Accessibility	-	Waiting lists, limited treatment options, finances, individuals' awareness/literacy re: Suboxone® treatment	11	3
Contextual Factors			55	7
Social Relationship	When relationships support/ facilitate success	How relationships can get in the way or distract from success	24	6
Life	Life circumstances bringing happiness	Balancing life tasks, stressors, and life events	20	6
External Assumptions	-	Others' judgment, stigma, and expectations about behavior	11	5

Table 4.6 continued				
Psychological Factors			46	7
Mindset	Insight, awareness, or wake-up calls; decision/desire to change; doing what is right for participant	-	19	7
Self-concept and Feelings	Confidence, hope, satisfaction with life, and self acceptance	Guilt, shame, internalized-stigma	17	5
Addiction	-	Cravings, denial, being an "addict", reasons for using	12	6

Treatment Factors. Participants discussed treatment factors that made it both easier and harder for them to achieve success in treatment, including *psychosocial treatment, Suboxone®, and availability* and *accessibility of treatment* (defined in Table 4.6). Participants described being grateful and appreciative for treatments that facilitated success, and described these treatments with words like "accountable", "support", "love", "empathy", "helpful", "comfort", and "encouragement". In contrast, participants discussed the distress they encountered when treatment posed barriers, using descriptive words and phrases like "horrible", "another drug dealer", "bitter", "judgmental", "awful", "struggle", "cookie-cutter", "have to lie", and "didn't pay attention". Notably, facilitative treatment involved support and compassion, while treatment that inhibits treatment success involved judgmental and inattentive treatment.

Participants also discussed some barriers to success when treatment programs did not meet the patient where they were in terms of goals and readiness to change. Participant nine highlighted this by noting:

I don't care who's telling you or what restrictions they're putting on you […] treatment does not work as far as quitting unless you want it to work. […] So being forced to—I entered the Suboxone® program because I was ready to quit using drugs. So even though I want to quit smoking, somebody telling me that I have to; it worries me because I don't want to end up losing the rest of my success by messing up my Suboxone® script because I didn't quit smoking in time for her so it goes back to that whole lying to your treatment program.

As this participant described, a mismatch in treatment philosophy and patient readiness and goals can create a barrier to feeling successful. Another consideration, the fine line between programs that facilitate success and those that pose barriers, is illustrated by participant eight's description of the issue of providers overprescribing opioids (not Suboxone®):

The problem is, there is a very fine balance between prescribing and treating people properly and prescribing what they need, and overprescribing and helping to enable an addict. I know there's a fine line. I mean that's a problem for someone, not me obviously, to solve. But hopefully things like this will help with that.

While participants expressed both gratitude and accolades for how *Suboxone®* has helped them, some participants acknowledged how Suboxone® conflicted with their beliefs that success equates with abstinence. On one hand, this participant described their gratitude: "The Suboxone®. I'm telling you that it's an amazing medication, and if it wasn't for the medication I'd be dead" (P4). Likewise, another shared, "If I had to take it the rest of my life, I'd be willing to do it" (P6). Conversely, some described getting off Suboxone® as being the "ultimate"

success. As explained by one participant: "If I could just get off Suboxone® and have children and not go back to where I was. That would be a real success in my eyes and heart" (P11).

Analysis revealed how getting off *Suboxone®* was often tied into participants' beliefs about abstinence. Some participants equated success with being abstinent from all substances, including Suboxone®. For example, one participant explained: "I'd like to be abstinent on my own ability, not on Suboxone®" (P3). Additionally, some participants believed abstinence to be the ultimate success because it "feels right", because of internalized shame, and because they see Suboxone® as being in contradiction to their future goals and values (e.g., not being dependent on a drug, being free, having children).

In contrast, others believed that success could go hand-in-hand with being on Suboxone® and other substances. As another participant articulated, "I wouldn't like to say that I'm not successful because I haven't stopped smoking weed, but I think that I'm successful because I'm not doing heroin" (P10). Likewise, participants believed Suboxone® could correspond with success when they were able to compare themselves to their past and observe their progress.

Participants described barriers related to treatment *availability and accessibility*. This encompassed the time required to get into treatment, availability of treatments in Alaska, financial barriers (including insurance), waiting lists, and misinformation about Suboxone® given by providers. Participant eight expressed the availability barriers he or she encountered:

> *And [treatment is] not made readily available. Like I live in [rural town] and I drive all the way to [another rural town] for treatment. So just availability, misunderstanding about how to get into them, or advertising for them.*

Contextual factors. Participants also described contextual facilitators and barriers, including *social relationships, life,* and *external assumptions.* Participants noted that *social*

relationships could support and facilitate, or get in the way of success. One participant explained how family and friends might facilitate success by providing support: "You need somebody you can go to. You always need somebody you can call and go to so they can say, "okay, I'm here for you. Talk to me" (P7). Interestingly, many of these positive social influences were noted to be from individuals in the OBOT program. One participant demonstrated how positive and reciprocal peer interactions in the OBOT group have facilitated their success: "For group it's the encouragement I get from other people's success…and them encouraging me" (P4). Participant eight discussed the importance of cutting ties with some old social contacts, which could pose barriers to success if they were still in contact:

> *I'm still seeing those shady characters which is just going to make it that much harder to succeed…I don't need to start buying Suboxone® off of the streets because I'd still be seeing the same people everyday from buying the Suboxone® off of the streets and therefore I wouldn't be able to get away from them.*

Life was discussed as both a barrier and facilitator to treatment. *Life* was considered a barrier to furthering success when it comes to juggling daily responsibilities as revealed in this participant's statement: "It's been hard to balance, work, life and kids with this group and doing both" (P3). Conversely, *life* was also understood as facilitating success when life circumstances bring happiness and peace, as seen with this participant's statement: "Another thing that helps me, we live on a ranch and I'm around horses, animals" (P4).

An interesting component of *life* that emerged during the interviews related to living in Alaska. Living in Alaska was noted to be a barrier to success when people misused substances due to boredom, the extreme seasonal variations, or having the money to spend. To exemplify how fluctuations in season can be a barrier to treatment, participant 12 noted:

I think the difference [between a successful treatment experience and a not so successful treatment experience] is just the season. When I was with [successful treatment], it was through the summer, starting like in March and to have that all through the summer [...] I was working a lot more. And then the light at midnight helped with my [life tasks]. Now that it's winter [...] I basically went backwards.

Additionally, one participant described how Alaska's economy and financial industries might contribute to drug use by noting, "drug use has always been an issue in Alaska because people have the money or money is more easily to come by [than] for people in other states" (P8). However, living in Alaska was also described as a facilitator of success in terms of being able to move to rural locations to remove oneself from triggers. This participant explained:

I mean that's why we moved to (rural, AK), we used to live in (more urban area) or (outside of urban area). We moved out here because I wanted to get away from all of the people that... we were trying to get where I didn't know anybody so that I could get away from the people so that I could stay away from the drugs. It's actually worked really well.

Finally, *external assumptions* primarily included barriers such as judgment, stigma, and societal assumptions about how individuals should behave. Participant three characterized these *external assumption* barriers among healthcare providers:

There's a stigma that's grown on the physician's side of it, the doctors' side of it. As they become aware of Suboxone®; they looked at the notes and see that we were addicts, there's a stigma as far as our character.

In turn, participant suggested that if education could be provided to treatment providers, doctors, and pharmacists, it could counteract the negative effects of judgment and stigma. Some

described the stigma as being due to not understanding Suboxone®, and many expressed a desire to educate providers so they are not perpetrating harm caused by stigma.

Psychological factors. Analysis also identified three specific concepts within psychological factors that made it both easier and harder for participants to achieve success in treatment, including *mindset, addiction*, and *feelings/self-concept*. *Mindset* was often described as being a motivator that included a decision and desire to change. Participants conveyed the necessity of desiring success. They noted that this desire could be sparked internally (e.g., insight, awareness), externally (e.g., from God or kids/family), or from a combination of the two (e.g., wake-up calls). Participant 11 exemplified how wake-up calls comprise both internal and external factors that lead to one having the desire to change:

> *It definitely was a struggle. But in the end I just had to put mind over matter and just put my willpower in there…my mom passed away and she passed away from drug use. And it really kicked me in the butt and made me think, do I want to die like that? And it really, really, really put a point in my mind that I don't want to die.*

Another psychological facilitator and barrier discussed by participants included *feelings and self-concept*. As described, when participants' self-concept and feelings become negative, it can act as barriers to success. For example, one participant shared, "The only thing time I have not felt successful in this program is when I was doubting myself for being on Suboxone®" (P6). Another participant admitted, "I was shameful to even come to this group" (P2). Still another participant shared how negative self-concept could act as a barrier given the shame associated with pre-treatment behaviors: "You feel like a dirty person when you start. You get off the

streets, you've been doing all kinds of drugs, and I guess that could make you feel unsuccessful at the beginning" (P10).

Although most *feelings and self-concept* factors were described as negative, some participants explained that positive *feelings and self-concept* facilitated their treatment success. One participant shared, "I do have hope that I can be not dependent on anything" (P3).

Finally, *addiction* was primarily discussed as a barrier. With a tone of gratefulness, *psychosocial treatment* and *Suboxone®* were described by participants as antidotes to *addiction* that can facilitate success. For instance, one participant stated, "[Suboxone®] helps with the cravings too" (P12), while another noted the helpfulness of, "go(ing) to group every month and [having providers] ask specifically about relapse or cravings" (P4).

Measurement. In addition to seeking an understanding of how participants define success and recovery, this study also sought to understand what factors would be important for measuring success in Suboxone® treatment. To address this question, participants were asked, "*How do we as in researchers and counselors know when there has been success? Are there specific things we could be asking to measure and look at if this person has been successful or not*?" In response, participants primarily provided advice about the ways success in Suboxone® treatment should be measured, rather than informing specific factors. Themes related to **Measurement** are outlined in Table 4.7.

Table 4.7
Themes Related to Measurement of Success

Themes	Conceptualization	No. ref	No. interviews [a]
Individualized and Flexible Definition	Success varies across patients Asking patients re: their ideas of success Measures need to be flexible and align with patient goals Understanding "who's definition of success" is being used - patients or societies?	9	5
Recognizing Needs/Traits of People who are Addicted	Physical and mental addiction Accurate measurement - difficult because people may be dishonest	8	4
Pay Attention and Recognize Progress	Recognizing small successes, progress Attending to how patients carry themselves (Do they look "normal"? Are they positive? Are they consistent?)	7	3
Other Specific Factors to Consider	Cravings, personality changes, appearance of good health, financial stability, relationships Assessing if patients are meeting their treatment goals	6	4

[a] *Focus group participants were not asked this question.*

Participants indicated that when measuring success, treatment providers and/or researchers should have an individualized and flexible definition. Specifically, participants recommended that treatment providers remain cognizant that success varies from person to

person. As such, providers should base their measurements of success on how their patients define success, and should develop flexible treatment planning to follow accordingly. Participants also discussed the need to consider which definition(s) of success are being used: the patient's, society's or the provider's?

Likewise, participants advised that what providers or researchers measure regarding success should be realistic and obtainable for the individual, and should align with the patient's goals for treatment. For example, one participant highlighted: "The questions that you ask to find out if anyone is going to be successful are also going to be a little different based on the needs of the individual" (P8).

Although participants did not specify exact factors that should be measured, they did suggest that providers and researchers should keep in mind the specific traits of people who struggle with addiction when measuring success, including considering physical and mental features of addiction. One specific trait that participants suggested might make it difficult to measure success was patient honesty; that is, patients providing inconsistent or conflicting reports. For instance, one participant shared, "when you're not staying sober your stories are completely different the next time around" (P4). Another participant elaborated on how honesty would impact the ability to measure success by noting, "you can only tell [that there has been success] if the people are being honest around you because I've seen a lot of people not be so honest" (P11).

Additionally, participants suggested it is important for providers and/or researchers to pay attention to how patients carry themselves, and to recognize progress. Paying attention could include noticing "small successes" and recognizing progress towards treatment goals as explained by participant 11:

I think just the small successes that people have in the beginning are really helpful, or are…just that [counselor] would say, 'I can see you can make it. You used to do this much, but now you're only getting through enough'.

Alternatively, it could include observing if they look "normal," if they are realistically positive-minded (for example, not denying challenges), and if their story illogically changes over time. To this end, one participant elaborated by recommending, "Doctors and counselors that really pay attention to exactly what you're saying and remember what you say or write it down" (P4).

Other factors participants suggested should be considered to when measuring success included the following: cravings, personality change, appearance of health, financial stability, if the person is meeting the goals they initially set, and their relationships with people in their lives. These were not described as specific aspects of success that should be measured per say, but were more so recommended as considerations for treatment providers in subjectively monitoring progress.

Although participants did not identify specific factors that should be measured, they did note that success should be measured based on the participant's definition of success. Accordingly, treatment providers and/or researchers may consider assessing the success themes and concepts listed above when measuring success.

Participants' Experiences of Being in the Study

In addition to the topics addressed during the Phase I focus group and Phase II interviews, participants were asked about their experiences of being in the study. Participants were also asked to assist with the analysis process during Phase I and to verify the findings during Phase III (discussed later in this chapter). Involving participants in the analysis process is

consistent with the CBPR approach (Israel et al., 1998). It also serves as a means to triangulate data and findings through member-checking (Charmaz, 2006).

Phases I and II. At the end of the focus group and each interview, participants were asked how they felt after participating in the study and if there was anything else they wanted to share. When discussing how they felt after participating in the study, participants reported having a positive mood, particularly because they had the opportunity to share, and because they wanted to help others through their own experiences. Participant twelve's response echoes such commonly expressed responses:

> *I feel better. I honestly want…to see other people succeed too, so if I can help other people succeed, that's going to make me feel even better. That's what I'm about now a-days so…it makes me feel good. So I hope this survey helps.*

Another participant noted the benefits they received from participating in the study by stating, "It's like a therapy session almost… it gets my feelings out into the air to myself…I'm in a positive mood" (P10).

Participants were also asked if there was anything else they wanted to share. Responses reflected participants' desires for the research to make an impact on treatment delivery. They shared additional views about treatment and drug use. Primarily, participants expressed ambitions to make a change, which included their aspirations to help others with consideration for environment/contextual factors that can influence addiction. Specifically, they discussed the need to increase treatment availability, to decrease stigma and judgment, to educate others (including doctors and pharmacists), and to establish and advocate for Suboxone® as a viable treatment option.

Participants further described effective treatment as being supportive, fitting to the individual's social milieu, and appropriately paced for each individual's readiness to change. In this regard, participants emphasized how important it is for patients to be ready and self-determined to achieve treatment success as described by participant 12:

> *That's what being in recovery is. I choose to be in recovery. I want this. I want this. I think that's the only way anybody's ever going to…you're gong to have to want it to recovery, but definitely the Suboxone® and therapy definitely help.*

Participants also expressed their views on drug use and abstinence. They particularly emphasized that abstinence of all substances should not be forced if the patient is focused on a different goal (e.g., getting off of heroin), as participant eight explained:

> *I will say as far as Suboxone® (treatment) goes, I feel like I have to lie about my smoking…I want to quit, I don't want to smoke… even though I want to quit smoking, somebody telling me that I have to doesn't (work).*

Phase III. After completing Phases I and II, participants were invited to attend an interactive findings forum during which they could hear, discuss, and provide clarity to initial findings that emerged from analyzing the focus group and interview data. Four of the twelve individuals who participated in the focus group and/or an interview participated in the findings forum. Most were male (n = 3, 75%). Three were in the advanced group, and one was in the beginner group.

The findings forum lasted 90 minutes. During the first half of the forum, I used PowerPoint slides to present initial findings. During the presentation, participants also viewed and discussed a conceptual model of the findings as represented by the metaphor of a tree (see

Figure 4.1). During the second half of the forum, participants further reflected on the findings and discussed how they wanted to see them used to create positive change.

All participants enthusiastically agreed with the findings. They further shared their feelings that being involved in the study was a rewarding experience. Most salient, participants were content that even if their own quotes were not presented, they still 'heard' their own stories in other participants' words. For instance, several participants explained:

P8: Just to hear other people and what they said, it was interesting to find out…with each answer, a lot of it related to me, even though it might not have been my answer. And there was a connection there with everybody I see.

P4: You see yourself in all of them; all of us are in there.

P4: Every [theme] hit somebody in a certain way.

When asked which study findings participants wanted accentuated, they primarily focused on their desire for Suboxone® to be credited as being an important contributor to their success. As one participant explained, "[people] would have more success with Suboxone® than without and just doing whatever it may be doing, counseling or whatever, without the medication" (P8). Another participant noted, "This has been my only experience in treatment, so I have nothing to compare it too, but this one worked for me because Suboxone® got me started" (P3). As with participants who took part in Phases I and II, the sentiment of findings forum participants was that Suboxone® saved their lives, as succinctly stated by this participant: "I'd be dead if it wasn't for Suboxone®" (P4).

Participants expressed their desire for the findings to be used to ensure knowledge that Suboxone® helps people achieve success. This desire was spurred by a fear that policy and decision-makers (e.g., legislation) would do away with this form of treatment. Participants also

discussed their desires that the findings be used to educate doctors, providers, dentists, surgeons, and pharmacists about Suboxone®. To demonstrate the participants' appeals to educate providers regarding opioid abuse, one participant stated, "The doctors aren't educated at all" (P2), and another noted, "Ya, they give pain pills out like its candy" (P4). Participants noted that these medical practices are unhelpful and that they "test our willpower" (P4), suggesting that when faced with a medical provider who will prescribe them opioids, they are forced with the choice of whether or not to refuse the medication. The overall sentiment of participants was that doctors are generally uneducated about Suboxone®, will prescribe opioids to someone on Suboxone® treatment, and often hold stigmatizing beliefs about Suboxone®.

While findings forum participants expressed enthusiasm for the overall findings, they also had positive reactions to the integrated conceptual model. The process of developing the model, along with the specific components and participant reactions to the model are discussed below.

Success/Recovery Tree: An Integrated Conceptual Model

During the findings forum, a conceptual model was presented to participants to help tell the "cumulative story" of their findings. The integration of the Phase I and II data is represented within the metaphor of a success/recovery tree (see below).

The metaphor of a tree originally emerged during the Phase I focus group. While participants were engaging in the "All-on-the-wall" procedure (during which individuals were asked to write and share aspects of success on sticky notes), the cohesion of the group began to wear down as participants became confused about the methodological process and ceased communicating with each other. While the group reflected on the ideas written on the sticky notes, and while organizing them into categories, one participant shared how he saw success

being represented as a tree. The spark given off by this comment ignited group cohesion, investment/buy-in, and enthusiasm for the project, as revealed by this interaction among several participants:

P7: In a tree they'd [work and responsibility would] be the lower branches but there's one single branch [functioning] holding them together.

Investigator: Good!

P4: Draw a tree!

P3: That's a good analogy. Best one I've heard.

P2: I like that. That makes sense.

As data analysis transferred from participants to researchers, the metaphor of a tree faded into the background as attention was afforded to initial, selective, and theoretical coding. In this analysis process, the data were broken apart and built back together. Yet, as the final stages of coding were being completed, the concept of the tree reemerged as the findings that emerged from the full data set (from Phases I and II) were integrated. The following conceptual model of a tree is grounded in the data and incorporates three of the research questions, which focused on participants being asked to define success, recovery, and the factors that act as facilitators and barriers to success. To clearly represent cumulative findings, each symbol denoted in the tree corresponds with the number of references in each concept, whereby larger symbols suggests concepts that were represented with greater frequency by participants.

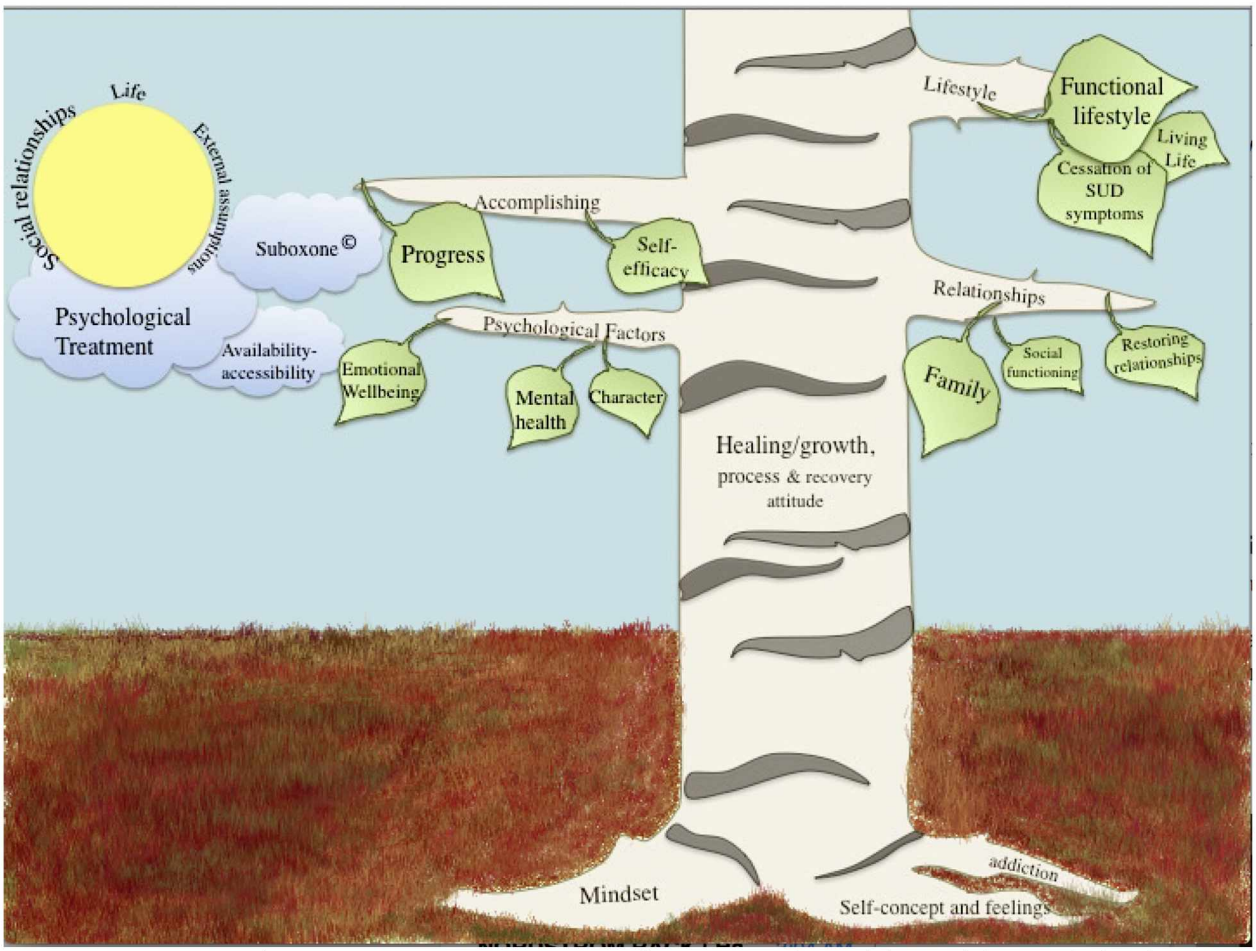

Figure 4.1. Success/Recovery Tree: An Integrated Conceptual Model. Participant-derived categories, themes, and concepts are represented in this model. The categories of success, recovery, and facilitators/barriers are represented by the branches, the trunk, and the sun/clouds/roots respectively.

Context. The facilitators and barriers (treatment factors, contextual factors, and psychological factors) are located in proximity to the success/recovery tree because participants did not indicate these factors within their definitions of success and recovery (the actual tree). Instead they were noted as contributing to the growth or deterioration of the success/recovery tree.

First, the contextual factor**,** *life,* represents setting or location. Participant's emphasized the importance of context and the necessity of there being a fit between one's context and one's definitions of success and recovery. Therefore, if the individual tree is well suited in the setting

(e.g., a palm tree on the beach, a birch tree in the woods), then it will facilitate its growth. However if there is a mismatch between the tree and the setting (e.g., a kapok tree in a desert, or a Mesquite in a rainforest), the tree may be inadequately nourished.

Other contextual facilitators and barriers (e.g., *social support, external assumptions, relationships*) are represented as the sun. Continuing with the metaphor, all trees require sunlight to grow, but sunlight that is too harsh (e.g., negative external assumptions) on a tree may cause it to wilt. In turn, insufficient sunlight (e.g., family/friends, support-connections) may weaken a tree because it must over-extend itself toward the sun.

Treatment factors (*psychosocial treatment, Suboxone®*, and *availability-accessibility*) are represented as three rainclouds as trees require rain to grow, but less than enough rain (e.g., lack of *availability-accessibility*) or too much rain (e.g., the wrong type of *psychosocial treatment*) will impede the growth of the success/recovery tree.

Finally, psychological facilitators and barriers (e.g., *mindset, self-concept and feelings,* and *addiction*) are represented as the roots of the success/recovery tree because they are internal, and often hidden or unseen. Strong roots, such as having a mindset oriented toward change, are illustrated as facilitating the growth process, while weaker roots that may have been contaminated by an external source (e.g., *self-concept and feelings*) may make it more difficult for the tree to flourish.

Success/recovery tree. The actual (above ground) tree in the model metaphorically illustrates recovery and success. **Recovery** is represented as the sturdy, foundational trunk that is steadfast in its growth. As conveyed by participants, the tree trunk contains a process of growth/healing with a recovery attitude, such as a desire to grow. Although the trunk eventually

stops growing in height, it continues to expand in width, thereby providing a sturdy base for the branches of success.

The branches represent identified themes of success and are the most easily identifiable and measurable elements of the success/recovery tree. This corresponds with the participants' distinction between recovery and success, where recovery is viewed as being a steadfast process, while success involves tangible outcomes. The highest branch represents success in terms of lifestyle (*functioning lifestyle, cessation of SUD symptoms, living life*). The second highest branch represents accomplishing (*progress, self-efficacy*). The next branch down represents relationships (*family, social functioning, restoring relationships*). Finally, the lowest branch of the success/recovery tree represents the concept, psychological factors (*emotional wellbeing, mental health).*

Summary and reactions to model. The integrated model metaphorically conceptualized the ways participants shared their understanding of success in OBOT, including recovery as a process, the factors that facilitate and inhibit OBOT success and recovery, and the outcomes of success. This visual metaphor was instrumental to participants during the focus group, and resonated with participants during the findings forum, as these reactions from participants illustrate:

"I'm impressed with it" (P2),

"I thought it was excellent and well thought out" (P3),

"It couldn't be any different; it's set up just perfect. I wouldn't change a thing" (P4),

"Ya. It has all the factors" (P8),

"Everybody's different, and it leaves room for everybody; it's a really excellent piece of work" (P3), and

"I really like the tree because the tree covers just about everything and anything" (P4).

Chapter 5: Discussion

This study aimed to develop a substantive, patient-driven theory of in Office-based Opioid Treatment (OBOT) success and recovery using qualitative methodology. Overall, findings suggest that for 12 individuals in an OBOT program in rural Alaska, the concepts of success and recovery are related, yet distinct. Participants described facilitators and barriers to treatment success, and expressed ideas about how OBOT success should be measured.

Success

The first aim of this study was to understand how OBOT patients understand success in OBOT. The findings of this study suggest that patients' definitions of success are much more nuanced than standard definitions of success that focus heavily or exclusively on consumption, and usually on complete abstinence (Butler Center for Research, 2011; McLellan et al., 2007; Miller & Miller, 2009; Tiffany et al., 2012; Witkiewitz, 2013). Specifically, four themes emerged from patients' definitions of success: (a) lifestyle, which included a *functioning/normal lifestyle, cessation of substance use disorder [SUD] symptoms, and living life* to the fullest; (b) accomplishing, which included *progress and self-efficacy*; (c) relationships, which included *family*, *restoring relationships*, *social functioning*; and (d) psychological factors, which included *emotional wellbeing*, *mental health*, and *character*. Each of the concepts is discussed vis-à-vis the literature below.

Lifestyle. Three lifestyle concepts emerged from the data. Participants mentioned the *cessation of substance use disorder symptoms*, including but not limited to reduction in use, cravings, and drug seeking. While this is similar to some standard outcome domains (SAMHSA, 2010b; White, 2007), this was just one among many ways participants defined success in OBOT. Our findings are consistent with another qualitative study conducted with patients in harm-

reduction programs who identified reduced substance use as just one among several other factors related to successful treatment outcomes (Lee & Zerai, 2010).

The current study illustrates that factors other than cessation of substance use disorder symptoms are also important in OBOT patients' definitions of success. Findings accentuate the role of a *functional lifestyle*, including fulfilling responsibilities and living a healthy and sustainable lifestyle, as a marker of success. The findings of the current study are similar to that of another study with patients with substance use disorders, who identified improved daily functioning as a beneficial outcome to psychosocial treatments such as psychodynamic therapy, motivational interviewing, applied relaxation, and cognitive-behavior therapy (Bergly, Grawe, & Hagen, 2014). In the current study, *functional lifestyle* was the most referenced concept, which suggests being able to function in society plays an important role in how patients define and experience success, and should likely be considered when measuring OBOT success. For instance, participants believed they were functional when they were able to contribute to society and do "normal" things, such as pay bills, maintain a safe place to stay, and own a car. While this study's findings converge with recommendations to measure outcomes such as employment status and functioning (Butler Center for Research, 2011; SAMHSA, 2010b), citizenship (White, 2007), and housing stability (SAMHSA, 2010b; White, 2007) as treatment outcomes for substance use disorders, such domains often remain neglected in treatment outcome research.

Living life, which included fully experiencing life and having a sense of purpose, holds parallels to the concept of quality of life. Experts have expressed the need to consider quality of life in regards to treatment outcomes (Butler Center for Research, 2011; Miller & Miller, 2009; Tiffany et al., 2012; White, 2007). This study's findings suggest that treatment success involved elements of "living life" to the fullest and fully engaging in life in a way that participants did not

before in many realms of their lives, such as dedicating time to family and enjoying life beyond what they could do in addiction (e.g., vacationing, being more emotionally present). Similarly, a subjective sense of a good quality of life predicted sustained remission in the use of illicit drugs (Laudet et al., 2009) and was identified as relevant to harm-reduction patients in a qualitative study (Lee & Zerai, 2010). This suggests that quality of life may be an important consideration for understanding how patients experience treatment success. Moreover, this study adds to the literature on quality of life by accentuating how participants understand their quality of life in contrast to their life in addiction.

Accomplishing. Accomplishing concepts, which emerged from study findings, include *progress* and *self-efficacy*. As patients described it, *progress* includes bettering oneself and the reappraisal of life goals. Research on meaning making suggests that reappraisal of goals is a positive and healthy way to make meaning (Park & Folkman, 1997), and to minimize dissonance when events in a specific situation (in the case of this study, drug abuse) are misaligned with an individual's beliefs and values (Skaggs & Barron, 2006). Again this finding is similar to what was found for substance abuse patients in a harm-reduction treatment program, who identified changes in future goals as an outcome they obtained from engaging in successful treatment (Lee & Zerai, 2010). The findings of this study add to the literature by suggesting that *progress*, and more specifically the reappraisal of life goals, is a relevant way for individuals in harm-reduction treatment programs, such as OBOT, to move toward treatment success.

In this study, having *self-efficacy* was described as contributing to participants' process of engaging in treatment and to their sense of being able to manage life in the future. *Self-efficacy* is a well-known concept in substance use literature that has, in part, been shown to predict reduction in opioid use (Reilly et al., 1995). The findings of this study suggest that *self-efficacy*

is likely important not only in assisting in positive treatment outcomes such as opioid use reduction and treatment engagement, but also in a patient's perceived ability to accomplish responsibilities in the future.

Relationships. Participants in this study described the important role of *family*, *social support*, and *restoring relationships* in regards to experiencing treatment success. Likewise, research suggests that having *family* and *social support* play important roles in treatment success. For instance, community reinforcement and family training (CRAFT) has been demonstrated to outperform therapy that is informed by NA philosophy in engaging unmotivated individuals to enter treatment (Meyers, Miller, Smith, & Tonigan, 2002). Similarly, Behavioral Couples Therapy (BCT) has ample evidence to support its effectiveness in improving outcomes, including reduced substance use and related problems and improved outcomes for family members (Fals-Stewart, O'Farrell, Birchler, Cordova, & Kelley, 2005). For patients in medication-assisted treatment, positive social support predicted the perception of enhanced family and social relationships, overall health, and ability to be abstinent from opioids (Cavaiola, Fulmer, & Stout, 2015). Moreover, social support has also been found to mediate positive treatment outcomes (see Black & Chung, 2014) Thus, the importance of family and social/communal support and engagement is well established as being related to substance misuse treatment outcomes.

This study's findings suggest in addition to family and social support, it may also be important to repair relationship ruptures that were caused by opioid misuse. Therefore, solely assessing for family and social support may not address all of the relationship factors involved in success for OBOT patients, and it may behoove clinicians and researchers to also consider if patients have begun to mend relationships.

Psychological. Participants described psychological concepts of *emotional wellbeing*, *mental health*, and *character* as important in treatment success. These patient derived themes are consistent with research that has found stress to be related to lower treatment engagement (Jaremko et al., 2015), using opioids to cope (Jones et al., 2014), opioid relapse, and craving (Sinha et al., 2007). Nevertheless, participants in this current study went beyond merely mentioning stress and mental health as they relate to treatment engagement and opioid use. They also noted how improved *mental health* enriched other areas of their life, such as being able to make better decisions.

Additionally, *character*, including feeling like a new person, was a psychological theme of success. Interestingly, character is frequently discussed in the recovery and NA literature (NA, 1992), and is emphasized during NA programs, with a focus on poor moral character as a reason for substance misuse. Some participants in this study did describe character with attention to moral deficits, such as describing themselves as having a dependent personality, which might be influenced by embedded cultural assumptions about the morality of substance use. However, this study's findings described *character* more with a focus on growth and overcoming, such as feeling good about being open and honest in life. It is possible that participants' definition of success relating to character may have been influenced by their participation in NA-related programs.

Success summary. In sum, important nuances in the definition of success for OBOT patients can be derived from this study. Although cessation of substance use disorder symptoms is an element of success, findings accentuated other factors. For example, the ability to live a functional lifestyle, the progression of quality of life, the reappraisal of life goals, and the belief in one's ability to be successful in the present and in the future are specific factors that parallel

the literature and are also relevant for OBOT success. Other factors found in this study included how emotional wellbeing, mental health, and feeling like a new person enriched one's life overall, not just in one's ability to engage in treatment. Finally, restoring healthy family and social relationships was an important process related to OBOT success. As such, these factors may be important considerations for measuring OBOT success.

Recovery

The second aim of this study was to understand how OBOT patients define recovery. Findings revealed that recovery included a process of healing/growth with a specific recovery attitude, including having a desire to change, making the decision to do so, and having acceptance about oneself and others. The most frequently endorsed theme of recovery, healing/growth, is similar to some literature that suggests that personal growth (Laudet, 2007) and healing from trauma (White, 2007) are components of recovery. Interestingly, while this was the most endorsed recovery theme in this study, it has received less emphasis in the literature compared to the requisite of abstinence (ASAM, 1982; Dodge et al., 2010; Galanter, 2007; Laudet, 2007; McLellan et al., 2007). This could be due to the fact that participants, by virtue of being in the OBOT program, are not by some definitions, abstinent. It could also suggest that patients understand recovery as being more than abstinence. Nevertheless, this challenges the ideal that one must be abstinent to be in recovery.

Patient-defined recovery was found to be a lifelong *process* that should be approached day by day, and that involved a "chain reaction of positive" (P6). This is consistent with literature that suggests that process is an essential component of recovery (ASAM, 1982; Galanter, 2007; Laudet, 2007, 2008; McLellan et al., 2007; SAMHSA, 2012; White, 2007). Interestingly, although success and recovery were found to be distinct, yet related constructs, this

study's findings demonstrate that process was the only real distinguishing factor between recovery and success. This suggests that, when attempting to distinguish recovery and treatment success, it may be important to consider if participants are describing a process (as in recovery), or a specific outcome (as in success).

Participant definitions of recovery were also consistent with aspects of twelve-step philosophy (NA, 1992). Interestingly, none of the participants indicated that they currently attend Narcotics Anonymous meetings, and only 3 of the 12 participants had been to Narcotics Anonymous in the past and reported it was not helpful. One interpretation of this is that beliefs embedded in the exosystem, that is broader social influences (Bronfenbrenner, 1994), have infused their way into participant definitions of success. Alternatively, there may be some universal elements of recovery that are present for those who adhere to Narcotics Anonymous, and those who do not.

Finally, all three recovery themes identified in this study are in line with recovery-oriented systems of care that identify similar guiding principles, including recovery as a transformative, holistic, self-directed process of healing that involves hope, gratitude, and a trajectory of rebuilding community (Sheedy & Whitter, 2009). Therefore, findings support the application of using the guiding principles of recovery-oriented systems in OBOT.

Facilitators and Barriers

The third aim of this study was to understand what facilitators and barriers patients identify as relating to their definition of OBOT success. Three key facilitators and barriers to success emerged from this study: psychological factors, treatment factors, and contextual factors.

Psychological factors. Psychological facilitators and barriers to success included *self-concept/feelings*, *mindset*, and *addiction*. In this study, *self-concept/feelings* could be a facilitator

to success when it included heighted self-confidence, while it could also be a barrier when it included negative feelings such as "feeling dirty." The literature suggests that perceived stress and maladaptive/avoidant coping styles (Hyman et al., 2009) and abnormal cortisol levels (Jaremko et al., 2015) negatively relate to opioid misuse and treatment engagement in methadone maintenance treatment. Similarly, participants indicated that they originally initiated opioid use to cope with stress (67%) and to escape something negative (58%). Alternatively, participants noted that *positive feelings and self-concept* facilitated OBOT success.

Mindset was found to be a facilitator of success that involved making the decision to change and working hard at making changes step-by-step. This concept maps on to motivation to change, an element of the transtheoretical model, which is established as a crucial component for behavioral change (DiClemente, 1999), and suggests that patients themselves also identify motivation as a crucial element to success in OBOT.

Addiction was primarily deemed to be a barrier to treatment success. Specific barriers included cravings, denial, mental dependency, relapse, enjoying using opioids, lying, and having low self-esteem because of drug use. Of these barriers, cravings were the most frequently endorsed, with participants noting that cravings were the hardest part of quitting opioids. This is consistent with evidence that cravings predict relapse in buprenorphine maintenance treatment (Tsui et al., 2014). Therefore, not only do cravings predict relapse, but they are also experienced by buprenorphine patients as challenging.

Treatment factors. Treatment facilitators and barriers included *psychosocial treatment, Suboxone®*, and *availability and accessibility* to treatment. *Psychosocial treatment* was described as a facilitator when it offered qualities such as support and accountability. It was described as a barrier when it was not aligned with patient goals or when patients felt judged. This study's

findings suggest that engaging in psychosocial treatment facilitated their success. For example, one participant noted, "I think it has a lot to do with the individual and the group therapy that we get here. It's been really helpful for me" (P4). This concurs with existing research suggesting that treatment engagement is one of the best predictors of success (Mee-lee et al., 2010; Orlinsky, Grawe, & Parks, 1994), and diverges from other research that suggested that psychosocial treatment does not improve outcomes for buprenorphine maintenance treatment (Amato et al., 2011; Moore et al., 2012; Weiss et al., 2011) and proposed that physician monitoring may be enough (Renner et al., 2014). For the participants of this study, psychosocial treatment was a necessary component of their success, suggesting that physician monitoring only may do a disservice to patients regarding their experiences of success.

The findings also highlight the importance of a respectful and non-judgmental treatment atmosphere as a facilitator to success. A similar concept was described in previous qualitative research where participants reported that de-marginalization, or being treated with respect by providers and having a trustworthy treatment environment, helped them achieve a successful treatment experience (Lee & Zerai, 2010). Thus, compassionate treatment approaches, rather than harsh, punitive moral models (Thombs, 2006) are likely to be more facilitative of treatment success with OBOT patients.

Similar to findings reported by Egan and colleagues (2011), participants in this study also described the importance of *psychosocial treatment* as a means of gaining self-esteem and connecting with others. Existing research has demonstrated that buprenorphine in conjunction with psychosocial treatment and/or mutual support groups is associated with longer treatment retention (Stein et al., 2005) and higher session attendance (Moore et al., 2012). Moreover, best practice recommendations advise the integration of psychosocial treatment and medication-

assisted treatment (Kraus et al., 2011). The current study findings support this recommendation as participants endorsed the importance of combining medication such as Suboxone® with psychosocial treatment to achieve success.

In this study, *Suboxone®* was revealed to be a facilitator by helping patients transition out of their old lifestyle and supporting healthy lifestyle choices. It was also discussed as a barrier when individuals believed the "ultimate success" was abstinence from all substances, including Suboxone®. These views varied based on the participant, where some had a goal of complete abstinence of all substances while others had goals of moderate use of some substances, such as marijuana.

In other qualitative studies, individuals who have had experience with medication-assisted treatment also reported ambivalent and contradictory ideals regarding Suboxone® (Hewell et al., 2016b; Redden et al., 2013), at times describing it as a "life saver," and at other times as a "crutch" or "liquid handcuffs" (Redden et al., 2013). As such, this study's findings suggest that Suboxone® can serve as either a facilitator or barrier to treatment, depending on the patient's treatment goals. Moreover, even when Suboxone® was discussed as a barrier, participants in this study still indicated that it was at some point in their lives a necessary facilitator for engaging in treatment, medically managing withdrawal and cravings, preventing relapse, and making positive life changes.

A final treatment barrier that emerged from this study was the *availability and accessibility* to treatment. This included references to waiting lists, limited treatment options, financial barriers, and individuals' (patients' and providers') awareness/literacy of Suboxone® treatment. This is particularly relevant to accessing and receiving treatment in rural Alaska where there are limited resources and treatment options. Such barriers have been identified in other

research, particularly in rural areas with individuals who would benefit from treatment for opioid misuse (Heil, Sigmon, Jones, & Wagner, 2008; Hewell et al., 2016a), and is particularly relevant to *Suboxone*® treatment, which has systemic barriers imposed related to the number of patients that providers can treat.

Contextual factors. This study revealed how contextual factors, including *social relationships*, *life*, and *external assumptions,* make it easier and harder to experience treatment success. Findings revealed *social relationships* facilitated success when individuals in treatment experienced encouragement and support from others. Similarly, one qualitative study demonstrated how individuals with hepatitis C virus in a psychosocial support group identified group cohesion and the group process as an agent that facilitated change (Woolhouse, Cooper, & Pickard, 2013). The current findings extend on Woolhouse and colleagues' (2013) findings by emphasizing how patients in OBOT perceive social support between people in their treatment program as a facilitator to success.

Alternatively, *social relationships* could pose barriers to success, such as when people from participants' addictive lifestyle would try to engage with them. Other research has demonstrated how family and social factors, such as delinquent influences, are related to substance misuse (Sharma, Sharma, & Barkataki, 2015) and how low social support relates to maladaptive coping and perceived stress (Hyman et al., 2009). Moreover, by cutting ties with substance users, individuals in one study reported increased rating of recovery identity (Dingle, Stark, Cruwys, & Best, 2015). Extending on this notion, participants in this study described the importance of cutting ties with negative influences in order to overcome this barrier and achieve success, suggesting that disengaging from unhealthy social networks is also important achieving success with OBOT patients.

In this study, *external assumptions* by others were primarily identified as a barrier that includes judgments, stigma, and misguided expectations about what the patient's behavior should be. Another study found that stigma could have an additive affect, where greater experienced stigma can create a heightened perception of stigma as a barrier (Conner & Rosen, 2008). More specific to medication-assisted treatment, stigma has also been identified as a barrier to the adaption of medication-assisted treatment (Roose et al., 2012). This study adds to the evidence of stigma as a barrier to treatment by demonstrating that stigma is also a barrier for OBOT.

Recovery-oriented systems of care emphasize the importance of observing the patient's life context when considering what the patient needs (Sheedy & Whitter, 2009). For participants in this study, *life,* defined as qualities of living that make it easier or harder to obtain success such as balancing tasks, life in Alaska, and stressors, is an interesting contextual facilitator and barrier. Participants described how factors that are significant to *life* in Alaska, such as the rural setting and extreme seasonal variations, can make it easier or harder to be successful in OBOT. An example of the role of extreme seasonal variations is when treatment is facilitated in the summer because participants are energetic, productive, busy, and excelling at work due to the midnight sunlight, or when treatment is more challenging in the winter because of boredom and low mood due to minimal sunlight. Therefore, this study expands on the notion that context is important in patient care by adding specific contextual factors for individuals in this rural Alaska setting.

Other. Although some literature suggests that pain and physical functioning play important roles in opioid misuse (Jones et al., 2014), this was not discussed as being a facilitator or barrier for our participants. Although 33% of the participants indicated chronic pain was a

health concern and 75% reported initiating opioid use because of pain, this was not described qualitatively as a predominant theme related to participants' definition of success, nor as a barrier to their success. It could that individuals in the sample were finding non-addictive ways to manage issues of pain, or had recovered from the physical conditions that caused them to need pain relief in the first place, making pain less relevant as a barrier to success. Nevertheless, this is an important consideration that should be explored with future research.

Measurement

The final aim of this study was to understand what factors participants identify as being important to measuring OBOT success. When participants were asked what they thought providers and researchers should consider when assessing for success, they recommended having an individualized and flexible definition, recognizing the needs/traits of people who are addicts, paying attention to the patient's progress, recognizing that success happens progressively, and considering other specific factors (e.g., personality changes, appearance of good health, financial stability, and relationships).

Guiding principles of patient-centered models of care suggest that there are many pathways to recovery and advocate for a person-centered approach to treatment (Sheedy & Whitter, 2009). This study's findings expand on this notion by prioritizing patient-identified treatment outcomes. Notably, participants advocated for measurement that aligns with the patient's goals, is flexible and individualized, pays attention to and recognizes progress, and attends to traits of people who are addicted (such as cravings, relapse, and honesty). Thus, this study expands on what has been described as a scant body of research (Sheedy & Whitter, 2009) by lending support to recovery-oriented systems of care for those in OBOT, particularly because the patients themselves reported factors that parallel this model.

Additionally, this study's findings emphasize the importance of considering honesty in reporting when attempting to assess for success. This parallels research that has highlighted the role of social desirability in measuring substance use related constructs, such as motivation to change and problem severity (Zemore, 2012). It also resonates with research that has suggested that using computerized, as opposed to paper-and-pencil questionnaires, may create unconstrained responding, thereby leading to more reporting of risky behavior (Booth-Kewley, Larson, & Miyoshi, 2007). Therefore, when deciding how to measure success, this study's findings suggest it is important to take into account the individual's definition of success in a manner consistent with recovery-oriented systems of care, while also considering the role of honesty and social desirability.

Research has established a need for a clear and consistent definition of treatment success, in part for the purpose of measuring outcomes (Betty Ford Institute Consensus Panel, 2007; Butler Center for Research, 2011; Dodge et al., 2010; Laudet, 2008; Laudet et al., 2006; White, 2007; Witkiewitz, 2013). A few participants in this study referenced other specific factors that converge with common treatment outcome domains when discussing the factors that should be measured to determine success. For instance, participants recommended considering if the patient has relapsed, which is consistent with substance consumption (SAMHSA, 2010b; White, 2007). They also recommended asking participants, "How they are doing financially" (P12). This is consistent with assessing domains of employment status and the ability to support oneself (Butler Center for Research, 2011; SAMHSA, 2010b). Finally, they recommended keeping track to see if the patient goes to jail. This is consistent with criminal activity (Donovan et al., 2011; McClellan et al., 2007; SAMHSA, 2010b). However, these domains were only mentioned in a

few instances, suggesting that they may not be as important to participants as developing ways to measure success that is salient to the individual patient's situation.

The specific constructs that participants identified in their definitions of success may be a starting point for determining what should be measured in OBOT. These constructs are in line with some recommendations of what constructs to consider when measuring outcomes, including mental health (McLellan et al., 2007; White, 2007), psychosocial/family functioning and support (McLellan et al., 2007; SAMHSA, 2010b; Tiffany et al., 2012; White, 2007), cravings (Tiffany et al., 2012), and self-efficacy (Tiffany et al., 2012). Additionally, quality of life factors recommended in the literature, which parallel this study's findings, include relationships, sense of meaning, self-esteem, and spirituality (Cummins et al., 2003; Wasserman et al., 2006). Importantly, while this study does provide some context to the specific content domains that might be used when measuring OBOT success, the most salient contribution of this study to the literature of substance misuse treatment measurement is the emphasis on individualized and patient-driven outcome markers for success.

Implications

This study provides a unique, in-depth understanding of how patients in OBOT define and experience success and recovery. The findings have implications for clinical practice, policy, and research.

Clinical practice. As has been discussed, traditional models of measuring success tend to focus on consumption-related outcomes (Butler Center for Research, 2011; McLellan et al., 2007; Miller & Miller, 2009; Tiffany et al., 2012; Witkiewitz, 2013). As this study has demonstrated, these traditional models fail to capture the nuances of gains that people make in treatment. Although a reduction in SUD symptoms is one element of treatment success in this

study, other factors that converge with other existing research, including functionality (Bergly et al., 2014; Butler Center for Research, 2011; SAMHSA, 2010b), quality of life (Butler Center for Research, 2011; Cummins et al., 2003; Laudet et al., 2009; Lee & Zerai, 2010; Miller & Miller, 2009; Tiffany et al., 2012; Wasserman et al., 2006; White, 2007), self-efficacy (Reilly et al., 1995), reappraisal of goals (Lee & Zerai, 2010; Park & Folkman, 1997; Skaggs & Barron, 2006), and improved relationships (Cavaiola et al., 2015) are particularly relevant.

This supports the notion that factors above and beyond consumption should be considered when measuring treatment outcomes (Butler Center for Research, 2011; Miller & Miller, 2009; Tiffany et al., 2012), particularly in OBOT. Findings of this study lend support for the need to reconstruct customary definitions of recovery to be more inclusive of non-abstinence oriented treatments and individuals, such as OBOT.

Similarly, this study's findings provide some guidance about modes of assessing success. For instance, participants mentioned the importance of considering if people are being honest when you are attempting to assess for success. They also noted the importance of measuring success in a manner that takes into account the individual's definition of success. These considerations in turn give credence to practices of incorporating anonymous assessment of success or bio-markers (such as urinalysis) to address the issue of honest disclosure, along with individualized behavioral indicators or interviews to address the importance of attending to the individual's definition of success.

Participants' definitions of success and understandings of facilitators and barriers were consistent with a biopsychosocial model of addiction (Miller & Carroll, 2006). This includes biological factors, such as using Suboxone® to medically manage withdrawal and cravings; psychological factors, such as emotional wellbeing, mental health, social stigma, motivation; and

sociocultural factors, such as life in Alaska, family, social contexts. Notably, treatment outcomes (e.g., relapse, treatment non-compliance) are impacted by similar biopsychosocial factors that were noted by the participants in this study, such as poverty and family support, in other long-term medical disorders (e.g., asthma and diabetes; McLellan, Lewis, O'Brien, & Kleber, 2000). This supports the need to emphasize these factors in treatment delivery and outcomes monitoring, while challenging some of the stigma that is often placed on substance use disorders that is not placed on other medical disorders. Additionally, patients identified facilitators to treatment that corroborate with recovery-oriented systems of care (SAMHSA, 2010a; Sheedy & Whitter, 2009; MHALA, 1995; VHA, 2011), including offering psychosocial treatment that is aligned with the patient's goals, is encouraging, is non-judgmental, values the whole patient, and moves beyond solely treating symptoms. Also fitting with recovery-oriented models (Sheedy & Whitter, 2009), this study's findings emphasized the importance of considering cultural and contextual variables, such as life in Alaska, when engaging patients in treatment.

Furthermore, when considering contextual variables, it should also be noted that, while only three participants reported going to Narcotics Anonymous and all three reported that this was not helpful, participant definitions of success echoed twelve-step philosophy. For instance, the notion that recovery is a process that happens day-by-day, and the embedded concept of a "dry drunk" (someone who has not healed), are also found in the Narcotics Anonymous literature (NA, 1992). One implication of this might be that the exosystem, such as the moral model of addiction prevalent in our society or the embedded practices and beliefs of Narcotics Anonymous, influence how treatment is delivered, thereby influencing how patients define success and recovery.

The American Society of Addiction Medicine (2011) and the Substance Abuse and Mental Health Services Administration (2005) recommend considering the following factors when designing individual treatment plans using buprenorphine maintenance treatment: biopsychosocial needs, comorbidity of psychiatric, medical and other substance use disorders, legal issues, employment/financial issues, social and familial support, and somatic impacts of drug use (Kraus et al., 2011; SAMHSA, 2005). When comparing these recommendations to the findings of this study, participants did minimally endorse medical and other substance use disorders, somatic impacts of drug use, and legal issues. However other factors that were endorsed include: relational factors, such as social and familial support; lifestyle factors, such as employment, finances; and psychological factors, such as comorbidity and biopsychosocial needs. It seems that participants understand success more holistically and teleologically, which is inconsistent with a strict medical model that focuses almost exclusively on symptom reduction. Therefore, as suggested by other authors, a biopsychosocial model and recovery-oriented systems of care are appropriate for OBOT (Kraus et al., 2011; MHALA, 1995).

Policy. In this study, participants identified the lack of availability and accessibility to treatment as major barriers to OBOT. At the time of this study, federal policy restricted the number of buprenorphine patients that providers could treat. Providers can only treat 30 patients during their first year of receiving a waiver to prescribe, and this can only be increased to 100 patients thereafter (SAMHSA, 2004). This policy serves as a significant treatment barrier by limiting access to treatment (National Alliance of Advocates for Buprenorphine Treatment [NAABT], 2015). This is a particular concern for individuals seeking OBOT in communities with limited availability of providers (Hewell et al., 2016a), such as in rural and/or low socioeconomic status contexts (Redden et al., 2013).

Notably, several participants engaged in this study with the hope that their insights would have an impact on OBOT services at a policy level. They highlighted the need for more varied models of OBOT in Alaska, such as OBOT programs that align with the patient's goals and readiness to change and do not force them into quitting other substances, such as cigarettes. They also expressed their fears about treatment being discontinued because of policy changes, conveyed a need for more providers and treatment programs, and noted the challenges they encountered because of provider limits on prescribing. For instance, participants described waitlists, having to travel far distances to receive treatment, and guilt associated with being in treatment when others are not permitted due to provider limits on prescribing. This speaks to the necessity of systematic change that increases accessibility to treatment. Moreover, in another study, program administrators who did not adopt medication-assisted treatment primarily noted systemic barriers, such as finances and availability of quality medical staff, (Knudsen, Abraham, & Oser, 2011), which further supports the need to address systematic barriers.

This study supports the importance of increasing availability and access to medication-assisted treatment combined with psychosocial treatment for opioid misuse, which is consistent with other recommendations (Kraus et al., 2011; SAMHSA, 2005). The Obama Administration announced a public health and safety initiative that, in part, aims to increase access to medication-assisted treatment (United States Executive Office of the President, 2015). This study's findings highlight the importance of advocating for policy that will increase access to effective treatment.

Research. This qualitative study helps to illuminate some of the factors patients deem important for OBOT success. Future research is needed to develop ways to operationalize and validly measure some of the specific attributes patients identified in this study, particularly since

these themes correspond with other factors identified in the literature. Specifically, it would be interesting to explore how psychological factors (emotional wellbeing, mental health, and character), accomplishing factors (progress and self-efficacy), lifestyle factors (functional lifestyle, cessation of SUD symptoms, and living life) and relational factors (family, restoring relationships, and social relationships) correlate with other OBOT outcomes. Moreover, definitions of success and recovery are necessarily influenced by experiences in treatment. Future research should explores how individuals in a treatment program with a different philosophy, without Narcotics Anonymous exposure, or who have spontaneously recovered without treatment, define and experience success and recovery from addiction.

Future research could explore pain as a barrier to OBOT success, as there is evidence to support that it plays a role in opioid use, but was not described as a concept related to being a barrier to success by participants in this study. Additionally, exploring the meaning that restoring relationships has for patients in OBOT treatment might yield useful information related to patients' process of obtaining OBOT success. For example, researchers might qualitatively explore how participants went about restoring relationships, and what about this process helps them feel successful in treatment.

Finally, it would be useful for future research to explore the role of character change as a component of OBOT success, as this typically is understood as having roots in a moral model of addiction, but still may remain an important feature of how individuals perceive their success. Comparing individuals in OBOT treatment who also ascribe to NA principles with those who do not might be one avenue for elucidating this.

Perhaps most importantly, this study's findings have connotations for how future research should be conducted. Specifically, researchers should consider the impact of honesty and social

desirability when conducting research. Anonymous measures, such as computerized surveys, may be one way to increase accurate reporting by study participants. It is also advisable that future researchers consider participant recommendations of having an individualized and flexible approach. With regard to both qualitative and quantitative research, using a collaborative approach, such as CBPR as was used in this study, would likely empower participants while gaining a more in-depth and nuanced understanding of treatment success.

Other Considerations, Limitations, and Strengths

This study uniquely contributes to the literature by providing an in-depth perspective into a phenomenon that has limited, and arguably misguided, understanding. This qualitative study may serve as a point of departure for future research, particularly within a political climate that warrants the need to understand, implement, and responsively evaluate patient's definitions of success in the effective treatment for opioid misuse: buprenorphine. The limitations, challenges and strengths of this study are outlined below and reported in Table 5.1.

Table 5.1
Study's Challenges, Limitations, and Strengths

Component	Challenges/Limitations	Strengths
Study Design		
I. Qualitative	a) Small, non-representative sample b) Responses based on one treatment program c) Lack of generalizability d) Researchers' a priori knowledge and assumptions	a) Sample provided rich, in-depth, perspectives a) In-depth analysis of poorly researched topic b) Pre-study biases acknowledged and determined prior to study
II. CBPR	a) Time intensive	a) Partnership with Sunshine Clinic ensured ethical and appropriate materials and processes b) Study stakeholders identified and established
Sampling & Recruitment		
n = 12	a) Sample size b) Lack of diversity within sample	a) Adhering to recommended sample size and theoretical sampling led to Theoretical Saturation
Data Collection		
I. Demographic Survey	a) Long and time consuming	a) Tool was pilot-tested
II. Focus Group (FG)	a) FG primarily consisted of advanced participants	a) Process was pilot-tested b) Group process fostered: Participant interaction Diverse perspectives Trust and relationship building
III. Interviews	a) Mode of data collection, telephone	a) Adherence to CBPR b) Enabled theoretical sampling
Data Analysis		
I. Analysis	a) Interview data were coded by one researcher	a) Focus group data coded by two researchers b) Data and information triangulation
II. Member-Checking	a) Low representation at findings forum	a) Adherence to CBPR b) Data triangulation c) Conceptual model of findings

Study design. This study used a qualitative design informed by grounded theory, directed content analysis, and community-based participatory research principles. Strengths and limitations that emerged from this design follow below.

Qualitative design. Qualitative research is time-intensive and demanding (Singleton & Straits, 2010), which presented challenges for conducting this study. For example, participants were contacted at multiple time points and researchers dedicated extensive time to all stages of the study. The time required fostered qualitative trustworthiness, or rigor, which included a directive, yet open and flexible design. For more information on the rigor of this design, see Table 3.6.

Due to the small, non-representative sample, it is not possible to generalize findings (such as the definition of success). Additionally, this study was conducted exclusively with one OBOT program in rural Alaska. Therefore, it is necessary to consider that the findings may be related to the culture and procedures of this program. Nevertheless, findings will add to the existing research and understanding of how the field of substance abuse defines treatment success and increase knowledge in local communities. Furthermore, the small sample size is appropriate for a qualitative design that encourages exploration of dynamic experiences with an emphasis on the participants' perspective (Singleton & Straits, 2010) by accruing in-depth data (Charmaz & Belgrave, 2012). Moreover, the iterative process of conducting the focus group and follow-up interviews with some participants assisted in verifying findings and saturating data (Charmaz & Belgrave, 2012).

Finally, the researchers' background knowledge of the field of substance abuse may have fostered challenges to remaining open to new information and thus forcing participant responses into preconceived categories (Charmaz & Belgrave, 2012). To address this, researchers remained

cognizant and reflexive about their biases. Specifically, they developed an *a priori* codebook to document literature-based expectations prior to conducting the study as a means to compare and contrast with data-driven findings.

Community-based participatory research. The CBPR approach required an intense time-commitment that was demanding for researchers and participants (Israel et al., 1998). For example, researchers met with participants at multiple time points, including before the study and after data were collected (during the findings forum). To address this challenge, time and communication processes were factored into the study schedule. As a positive, time committed to fostering partnership and participation fortified the collaboration between the OBOT program director and researchers. Having this collaboration served to lessen other study challenges (discussed later) and increased the likelihood that the study findings would be useful to stakeholders (Israel et al., 1998).

Sampling and recruitment. As discussed above, due to the relatively small sample size (n = 12) study findings should be interpreted with caution. Nevertheless, the goal of attaining in-depth knowledge and theoretical saturation was achieved per following recommendations afforded by Guest and colleagues (2006). However, when reviewing the findings of this study, it is important to consider that the sample represents participants from one treatment program and their definitions of success and recovery were likely influenced by their experiences in this particular treatment program. The differences in goals for substance use between beginner and advanced group participants may attest to this with more advanced group participants having the goal of complete abstinence with more beginner group participants having the goal of moderate or controlled use of some substances (e.g., alcohol and marijuana). Although a comparison between beginner and advanced group participants was not a specific aim of this study,

discrepancies in goals could be interpreted as suggesting that patients remain in treatment if their beliefs align with program philosophy, or that program philosophy influences how patients define success. As mentioned above, future research should be conducted to further clarify how programmatic group membership (e.g., beginner or advanced group) and time in treatment relate to individuals' definitions of success.

Recruitment, particularly for the telephone interviews, was a challenge that was mitigated by the partnership with the OBOT program director that assisted in recruitment. After participants were recruited to the study, there remained a discrepancy in representation. For example, there was a low representation of beginner patients during the focus group. Theoretical sampling was used to target specific populations to address issues of representation (e.g., patients from the beginning group were targeted for interviews). Still, the study may be limited by its lack of ethnic diversity. While the sample is not representative of the overall United States population, it is representative of the population of this study (patients in Sunshine Clinic's OBOT program). Nevertheless, it is important that future research aimed at understanding patient's definitions of success include diverse samples.

Data collection: Demographics survey. The demographics survey was a relatively long and demanding component of data collection. The survey comprised 33 complex items that took participants approximately 20 minutes to complete. However, participants expressed appreciation for the detailed survey questions, and they conveyed that the survey encompassed many important aspects of their addiction. This was most likely due to the survey being co-developed with professional advisors, and pilot-tested with multiple individuals and groups prior to data collection.

Focus group. Limitations of the focus group include its length and participant composition, including primarily advanced treatment group participants. Nevertheless, the group format and All-on-the-wall procedure facilitated an interactive and creative process of gathering diverse perspectives and establishing relationships with and among study participants. Additionally, aspects of the focus group process were pilot-tested to refine question wording and the methodology of the All-on-the-wall procedures. Suggested revisions enabled researchers to strengthen the protocol and work through some procedural difficulties with the All-on-the-wall procedure. While the pilot testing enabled a smoother facilitation during the actual data collection, there was still some confusion amongst the group regarding the approach. This required researchers to remain flexible and open while adhering to the protocol.

Interviews. Due to geographical constraints, the in-depth interviews were conducted via telephone, rather than in person. While telephone interviewing increased convenience for both the researcher and participants, lacking were visual cues to develop and convey empathy, rapport and trust (Novick, 2008). However, by adhering to a CBPR design, the OBOT program director helped mitigate this challenge by helping to introduce the researcher to potential interview participants. Additionally, the researcher made efforts to contact participants multiple times to get to know them and to develop rapport. Moreover, telephone interviews may have actually increased comfort for participants, thereby helping them to disclose sensitive information (Novick, 2008). Other strengths of this study's interviews include the in-depth data that were collected, the ability to collect information that clarified and verified data collected during the Phase I focus group, and that theoretical sampling was used to achieve theoretical saturation.

Data analysis. Although two people analyzed and coded the focus group data (a study strength), the interviews were coded solely by the lead researcher (a study limitation). This may

have led to biases unintentionally guiding data interpretation. However, to mitigate this limitation, data and analysis were triangulated across data collection methods (focus groups and interviews) by using the existing literature to guide an a priori codebook to check assumptions, collecting diverse modes of data (transcripts of recorded focus group and interviews, process notes, photographs), having two researchers code the focus group transcript, connecting with academic and community advisors, and presenting preliminary findings to participants for the purpose of member-checking (described below).

Member-checking. A findings forum was conducted to verify and clarify findings. Although all participants from Phases I and II were invited and the forum was scheduled after their monthly treatment group meeting to be convenient and encourage participation, only four people participated. Still, the findings forum aligned with the CBPR approach as it enabled participants to be involved as partners and included an element of brainstorming future directions (Israel et al., 1998). The findings forum also provided a check for the data and findings, as participants were able to clarify misdirected findings (Charmaz, 2006), thereby further triangulating the data (as described above). A final strength that emerged during data collection and analysis, and then aided in presenting findings during the findings forum was the conceptual model (tree metaphor) that provided a meaningful and visual tool to enhance member checking.

Conclusion

This study provides an in-depth understanding of how OBOT patients understand and conceptualize success and recovery in their treatment. Despite the small sample size (n = 12) and the exclusivity of sampling from one OBOT program, findings offer useful information for treatment providers and researchers. A visual and conceptual model of OBOT success and recovery also emerged.

Findings reveal the role of relationships, lifestyle factors, psychological factors, and accomplishing as aspects of success for OBOT patients. A notable barrier to achieving this success is the availability and accessibility of treatment, while psychosocial and Suboxone® treatment that was compassionate and nonjudgmental served as an important facilitator to success. Findings lend support for the use of a biopsychosocial approach within a role of recovery-oriented systems of care for OBOT patients. Furthermore, factors revealed in this study may be useful to consider when implementing OBOT programs and measuring success.

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Appendix A
Glossary of Qualitative Terminology

Term	Definition
Purposive Sampling Techniques (Patton, 2002)	
Extreme or Deviant Case	Sampling extreme/deviant cases that are not typical of the phenomenon (e.g., overcoming extreme adversity to obtain success).
Intensity	Intensely, but not extremely, represent the phenomena; information-rich.
Maximum Variation*	Used to determine overarching patterns, this approach samples diversely across conditions. In this study, maximum variation was used to get a representative sample of beginner versus advanced patients.
Homogeneous*	Particularly useful in focus groups, this approach reduces variation and focuses the analysis. In this study, the focus group was primarily homogenous (advanced group participants).
Typical Case	This approach is used to capture the "typical" case (e.g., someone who manifests the typical pathway to success).
Stratified Purposive	Facilitates comparisons between groups by sampling within a subgroup.
Critical Case*	This technique assists in theory generalization because "if it's true of this one case, it's likely to be true of all other cases" (1990, pg. 182). In this study, used when sampling person in the individual program.
Snowball*	This technique asks "people who know people" to identify information-rich cases.
Criterion*	This technique samples all people who meet some criterion. In this study, criterion included OBOT patients at Sunshine.
Theory-based or Operational Construct	To elaborate on or examine the validity of an existing construct, this approach samples individuals who embody the theory or construct.
Confirming/ Disconfirming Cases*	Used to explore variation and seek out cases that disconfirm data, this approach is used after the initial analysis to deepen the analysis. In this study, it involved sampling a young beginner client who was struggling to be successful.
Opportunistic	This flexible technique is used to follow new leads.
Random Purposive	If this potential sample is too big, this approach can be used to credibly select cases.

Appendix A Table continued	
Politically Sensitive Cases	This technique keeps politically sensitive cases in mind when sampling to intentionally attract or detract attention from the study.
Convenience	As the name connotes, this technique is efficient, yet lacks credibility and yields information-poor cases.
Combination or Mixed Purposive*	This technique combines different purposive sampling techniques to triangulate data and encourage a flexible stance.
General approach to analysis	
Theoretical Sensitivity	Quality of a researcher and his/her ability to have insight, be reflexive, and make meaningful inferences about the data. These qualities are developed by the literature, professional experiences, personal experiences, and the research project itself (Strauss & Corbin, 1990).
Reflexivity	Process of being reflective and explicit about one's biases
Constant Comparison	Data is iteratively compared with other data, other categories, and other concepts to deconstruct and reconstruct theory (Bryant & Charmaz, 2007 Charmaz, 2006; Glaser & Strauss 1967; Glaser, 1978; Strauss, 1987)
Exploring the data	
Coding	Codes outline the 'skeleton' of the theory (Charmaz, 2006) through the process of organizing data around 'themes' (Kelle, 2007).
Initial Coding	Careful initial coding meets two goals of grounded theory—fit and relevance—by using open coding, in-vivo coding, and diagraming (Charmaz, 2003/2006).
In vivo Codes	Codes that are symbolic markers of the language participants use (Charmaz, 2006)
Selective Coding	Directed, active, and conceptual process where codes are discriminated based on the emerging theory (Charmaz 2003/2006). This process establishes "core" categories (Drauker et al., 2007).
Theoretical Coding	Development of relational codes that are weaved together around the "core" categories. This abstract process moves codes from literal to a symbolic and theoretical (Charmaz, 2006).

Appendix A Table continued	
Theoretical Sampling	An evolving, systematic process that follows up on emerging data and examines relationships between categories to add clarity and refine categories until saturation is reached (Charmaz, 2006). This was the primary mode of sampling for this study. It was also used to follow up on themes in order to saturate data. After data were analyzed, gaps in the data and emerging themes were identified. Using this process, participants were selected for subsequent stages of data analysis accordingly (e.g., sampling individuals in the beginner group because of an underrepresentation in the focus group) until no new themes emerged.
Data Saturation	Theoretical saturation occurs when the collection of more data does not reveal new data nor profit further theory development (Bryant & Charmaz, 2007). Dey (1999) critiques the feasibility of saturating data and points out that a more accurate term for what actually happens in grounded theory research is 'theoretical sufficiency' (in Charmaz, 2006).
Organizing the data	
Codebook	The codebook is a way to organize and structure the codes. In our codebook, the first column in the codebook represents grounded theory coding *categories*, which closely parallel Glaser's *coding families* and Strauss and Corbin's *coding paradigm* in that it groups together codes that are conceptually similar (Bryant & Charmaz, 2007). Like coding families, this organizational strategy helps to "avoid being flooded by the data (Kelle, 2007, p. 200-204)." The second column includes initial coding categories based on key concepts from existing research and theory as recommended by Potter and Levine-Donnerstein's (1999). The third column includes operational definitions based on theory as suggested by (Hsieh & Shannon, 2005).
Auditing/ Memo Writing	Auditing provides a thorough and explicit rationale for selecting participants using theoretical sampling (Currie, 2009). Memo writing is the process of taking thorough notes of the analysis process.
Theoretical Sorting	The creative and hands-on process of sorting data to allow for abstract comparisons (Bryant & Charmaz, 2007).

* Purposive sampling techniques that were used in this study

Appendix B
Professional Advisor Memo

You are being asked to advise and partner in this study because you have extensive knowledge and understanding of the challenges and successes of OBOT, have connections with key community members (professionals, patients, and other stakeholders), and have demonstrated success in your OBOT program. This qualitative study is informed by Community-based participatory research (CBPR) principles and takes a constructivistic grounded theory approach in conjunction with directed content analysis principles.

By agreeing to advisor in this study, you are viewed as an expert, collaborator, co-researcher, and shared decision-maker. The study design is reciprocally beneficial, empowerment-focused, and action-based. Therefore, you will be privy to knowledge that will assist your agency and community in increasing successful OBOT.

Five key pillars of CBPR based on Kemmis and McTaggart (2005) and Israel and colleagues (2001) inform your involvement:

- **Shared ownership of the project**. This involves long-term commitment from both you and I, collaborative involvement through each step of the project, shared interpretation and dissemination of findings, and shared benefits of integrating knowledge with action.
- **Community analysis of social problems**. The topic for this study emerged from a preliminary CBPR study aimed at identifying and combatting barriers to Buprenorphine treatment in Interior Alaska. Multiple stakeholders were involved in the interpretation of findings and determination of future directions. This study emerged as a community-informed next direction.
- **Emphasis on action in the community.** This study emphasizes contextual variables and is committed to application-based research.
- **Strength-based and empowerment-focus**. This study focuses on the strengths of people who have been successful in OBOT. It intends to empower partners and stakeholders (you and your patients) to increase OBOT success.

- **Iterative and cyclical process.** Using the grounded theory approach of theoretical sampling, data will be analyzed and interpreted as it is collected. As professional advisors, I will be looking to you to help interpret findings throughout the project to help 'hone in' on the essence of patient success.

To accomplish this logistically, I am asking the following from you:

- Willingness to provide ethical, cultural, and community oversight
- Willingness to participate in monthly meetings to guide the research (including project design, pilot testing study instruments and providing feedback, data interpretation and dissemination, and guidance of future directions)
- Willingness to recruit and screen participants based on eligibility criteria and selection of individuals who will provide rich information.

Appendix C
Demographics Survey

Thank you for taking the time to be involved in this study. We would like to start by asking you some questions about yourself and your history. Please complete all of the questions. Please indicate if you are unsure or if the question does not apply.

The first set of questions asks about your basic demographics.

1. What is your gender?
    a. Male
    b. Female
    c. Other (please specify): _____

2. Do you live in Alaska fulltime (aside from vacations/short travel)?
    a. Yes
    b. No

3. How would you describe where you live?
    a. Urban (city/populated)
    b. Rural (scarcely populated)
    c. Remote (off the road system)
    d. Other (please specify): _____

4. What is your current living situation?
    a. Living alone
    b. Living with spouse or partner
    c. Living with roommate(s)
    d. Living with children (only)
    e. Living with parents
    f. Other (please specify): _____

5. What is your age? _____

6. Which of the following best describes your race/cultural tradition/ethnicity? Please check all that apply:
    a. Caucasian
    b. African American
    c. American Indian or Alaska Native
    d. Asian American
    e. Native Hawaiian or other Pacific Islander
    f. Russian
    g. Hispanic/Latino
    h. Other (please specify): _____

7. What is your current employment status?
    a. Employed: full time
    b. Employed: part time
    c. Student
    d. Disabled (not able to work)
    e. Unemployed
    f. Retired
    g. Other (please specify): _____

8. How would you describe your household income?
    a. I struggle to meet my needs
    b. I have enough to meet my needs
    c. I have more than enough to meet my needs

9. What is your relationship status (please select one best answer)?
    a. Single
    b. In a relationship
    c. Married
    d. Divorced, separated, or widowed
    e. Other (please specify): _____

10. Do you have children?
    a. Yes
    b. No

The following questions are specific to your health WHILE IN ACTIVE ADDICTION.

11. Please rate your health while in active addiction in the following areas by marking 'X' in the appropriate category (poor-excellent):

	Poor	Fair	Good	Very Good	Excellent
Physical health					
Mental health					
Spiritual wellbeing					
Social functioning					
Other (please specify): _____					

12. Please select how your active addiction impacts/impacted you in the following areas by marking 'X':

	Negatively	No impact	Positively
Physical health			
Emotional health			
Mental abilities/health			
Spiritual wellbeing			
Social functioning			
My family relationships			
My personal relationships			
My behavior			
My work or education			
The way I feel about myself			
My life as a whole			
Other (please specify): _____			
	Increased	No impact	Decreased
Experience of pain			
Life problems			
Illegal activities			
My household income			

13. Would you say you are currently in active addiction (e.g., using on a regular basis)?
    a. Yes
    b. No

The following questions are specific to your CURRENT health.

14. Please place 'X' next to the health concerns that you currently experience.
___ Abscesses or collapsed veins
___ Arthritis and other rheumatologic problems
___ Brain injury
___ Breathing issues (such as COPD, asthma)
___ Cancer
___ Chronic pain
___ Heart health issues
___ Infectious disease (such as HIV, Hepatitis B and C)
___Liver and/or kidney issues
___Other (please specify): _____
___None of the above

15. What, if any, emotional concerns (for instance, depression, anxiety, stress) do you currently experience?

_____
_____
_____

16. Please rate your current health in the following areas by marking 'X' in the appropriate category (poor-excellent):

	Poor	Fair	Good	Very Good	Excellent
Physical health					
Mental health					
Spiritual wellbeing					
Social functioning					
Other (please specify): _____					

The following questions ask about your history with opioid use and treatment.

17. How did you begin using opioids (please check all that apply)?
__They were prescribed to me by a doctor
__ I used opioids for fun or to enhance my mood
__I used opioids to get "high"
__I used opioids to escape something negative
__I used opioids to help me cope with a psychological issue (e.g., depression, anxiety)
__I used opioids to help me cope with stress
__I used opioids to help me manage my pain
__I used opioids because they were available
__I used opioids to fit in
__Other (please specify): _____

18. What opioids have you used (*check all that apply*):
___Prescription opioids (**as prescribed**)
___Prescription opioids (**not as prescribed**)
___Morphine (**as prescribed**)
___Morphine (**not as prescribed**)
___Methadone (**as prescribed**)
___Methadone (**not as prescribed**)
___Medication-assisted treatment, such as Buprenorphine (**as prescribed**)
___Medication-assisted treatment, such as Buprenorphine (**not as prescribed**)
___Heroin
___Other (please specify):
_____

19. What is/was your opioid of choice? _____

20. What was your preferred way to take opioids (please select <u>one</u> best answer)?
a) Orally
b) Snorting
c) Inhalation/smoking
d) Intravenously
e) Other (please specify): _____

21. At any time, would you consider your opioid use to have been "problematic" or "addictive"?
a) Yes
b) No

22. If yes: Approximately how long, excluding periods of abstinence, did you have "problematic" or "addictive" use of opioids? _____

24. Have you ever experienced withdrawal symptoms?
a) Yes
b) No

24. Which of the following most accurately describes your **<u>current</u>** substance use?

	No Use	Moderate/Controlled	Unrestricted/ Heavy Use
Nicotine			
Alcohol			
Marijuana			
Opioids			
Methamphetamines/other stimulants			
Other Drugs (please specify):_____ _____			

25. What are your **goals** in regard to substance use?

	No Use	Moderate/Controlled	Unrestricted/ Heavy Use
Nicotine			
Alcohol			
Marijuana			
Opioids			
Methamphetamines/other stimulants			
Other Drugs (please specify): _____			

26. Including your treatment at Sunshine Community Health Center (outpatient), please indicate the instances, length, and helpfulness of each of the treatment types below.

Treatment type	Separate number of instances in treatment	Length of treatment	How many were helpful?	Did you stop treatment (Yes/No)	If yes, why did you stop treatment (voluntary, kicked out, etc)
Inpatient					
NA/AA					
Outpatient					
Intensive Outpatient					
Other (please specify): _____					

27. Although this treatment is voluntary, is your treatment at Sunshine mandated in any way?
    a) Yes
    b) No

28. If yes, please check all that apply:
    a) Court
    b) Family
    c) Work
    d) Other (please specify): _____

29. What Sunshine program are you in?
    a) Beginning group (every other Thursday)
    b) Advanced group (third Friday of the month)
    c) Individual program

30. Do you consider yourself in recovery?
    a) Yes
    b) No

31. If yes, how long have you been in recovery? _____

32. Why do you feel like you are or are not in recovery?

_____
_____
_____
_____

33. Is there anything else you would like to share?

_____
_____
_____
_____

Thank you for taking the time to complete this survey.

Appendix D
Focus Group Protocol

This focus group protocol corresponds with the three stages outlined in the proposal and includes the following material: (a) Welcoming Script; (b) Ground Rules for the Focus Group; and, (c) Focus Group Questions.

Stage 1: Welcome Script

- Introduce Valerie Hewell and Gabriel Cartagena: relevant personal information (such as years lived in Alaska), professional background, and interests/commitment related to the study
- Pass out flyers
- Introduce study: background and development, purpose (dissertation), aims, and research questions
- Introduce general methodology and approach: CBPR and qualitative approach, three phases, timeline, what is being asked of participants
- Read informed consent
- Open the floor for questions

Stage 2: Ground Rules for Focus Group

The following rules were written on a flip chart and discussed after the informed consents were signed. Participants were asked if other rules should be added:

1. Patience! Only one person talks at a time.
2. Confidentiality! "What happens in the room stays in the room." Everything (including illegal activities such as drug use) will be kept in this room. Researchers are mandated reporters who must break confidentiality if there is a disclosure or risk of harm to self or others, especially children or elderly. Please respect the confidentiality of other group members.
3. Participate! Everyone is encouraged to participate. There are no right or wrong answers—we want to hear what <u>you</u> believe!
4. Balance! We want to hear both sides of the issue: positive and negative
5. Agree to disagree…respectfully! We want to respect diverse opinions of people from all backgrounds—gender, culture, age, etc.

Stage 3: Data Collection

The focus group questions, procedure for collecting the data, and corresponding research questions can be found in Table 3.D-1 (below).

Table 3.D-1
Focus Group Questions

Procedure	Research Question	Questions
Flip chart	1 and 2: Defining Success & Recovery	Question Block 1: 1) How do you define success in Suboxone® treatment? What does that mean to you? 2) How do you define "recovery?" 3) How does your definition of treatment success relate to, or differ from, your definition of recovery? 4) How did you come to define success and recovery like this? (*prompt: providers, family, support groups, friends*) *Participants were asked the first set of questions. Responses getting at participant's broad definition of success were jotted down on a flip chart and discussed as a group.*
Naming Domains: Sticky notes	2 and 3: Elements of Success	Question Block 2: 5) Think about yourself in Suboxone® treatment. There may have been times that you felt successful, and there may have been other times that you did not. What contributes to feeling successful, or not feeling successful, in treatment? *(if responses center around substance use): Are there any other things that could make you successful beyond whether you used or not? What did you do differently in those times that helped you not use? What things did you learn in treatment, or elsewhere, that helped you do this differently? What positive and negative changes resulted from treatment?* 6) What makes it easier or harder for you to achieve success in {domain}? What do you need? (*Prompt to get at different ecological levels, i.e., personally, in treatment, with important people in their lives, employment/school, on societal level*) *Participants were asked the second set of questions. They were asked to write down their thoughts about "successful treatment" on yellow sticky notes and their thoughts about "not successful treatment" on green sticky notes. They were asked to share and collaboratively discuss their responses with the group and then place their sticky notes on a blank wall. Participants collaboratively sorted the sticky notes into domains.*
Flip Chart	Debriefing	1) Compared to when you arrived, do you feel better, the same, or worse? 2) How would you describe your experience during the focus group overall? 3) Would you be interested in future research related to health and wellness in rural Alaska? 4) Is there anything else you would like to share or feel I should know before you leave?

Appendix E
Interview Protocol

After obtaining informed consent, participants were first asked the demographics survey questions. Then, the following semi-structured interview questions were asked with prompts (depending on the participant) to further illuminate themes.

Research Question	Questions
1 and 2: Defining Success & Recovery	Question Block 1: 1) How do you define success in Suboxone® treatment? What does that mean to you? 2) How do you define "recovery?" 3) How does your definition of treatment success relate to, or differ from, your definition of recovery? 4) How did you come to define success and recovery like this? (*prompt: providers, family, support groups, friends*)
2 and 3: Elements of Success	Question Block 2: 5) Think about yourself in Suboxone® treatment. There may have been times that you felt successful, and there may have been other times that you did not. What contributes to feeling successful, or not feeling successful, in treatment? *(if responses center around substance use): Are there any other things that could make you successful beyond whether you used or not? What did you do differently in those times that helped you not use? What things did you learn in treatment, or elsewhere, that helped you do this differently? What positive and negative changes resulted from treatment?* 6) What makes it easier or harder for you to achieve success in {domain}? What do you need? (*Prompt to get at different ecological levels, i.e., personally, in treatment, with important people in their lives, employment/school, on societal level*)
4: Measuring Success Debriefing	Question Block 3: 7) How do we know when there has been success? What should we be asking to assess or measure if you have been successful? 8) Compared to when you arrived, do you feel better, the same, or worse? 9) How would you describe your experience during the interview overall? 10) Would you be interested in future research related to health and wellness in rural Alaska? 11) Is there anything else you would like to share or feel I should know before you leave?

Appendix F
Participant Debriefing Procedure and Resource Sheet

After participants finished the focus group or interview, the researcher offered participants the referral sheet (below) and said:

During this group (interview), the topics we discussed may have evoked strong reactions. These reactions are normal. If you would like help working through some of these reactions, there are services available to you. You can talk to your counselor at Sunshine Community Health Center. Alternatively, there are also support groups, like Narcotics Anonymous, that are available. Finally, if there is immediate discomfort for which you feel at risk of hurting yourself or others, you may call crisis hotlines or go to Providence hospital. These services are included in this resource sheet. Do you have any questions or concerns at this time?

Resource Sheet

Sunshine Community Health Center
- Outpatient medical and mental health services
- (907) 733-2273
- www.sunshineclinic.org

Anchorage Narcotics Anonymous
- Free 12-step support group for people in recovery
- (907) 277-5483
- www.akna.org

Anchorage Community Mental Health 24/7 Crisis Hotline
- Consumer-driven behavioral health care
- (907) 563-3200
- www.acmhs.com

Providence Crisis Recovery Center
- Professional help managing acute psychotic symptoms
- (907) 563-5006

Providence Alaska Medical Center
- If you or someone you know is a danger to themselves or others, you can contact the Providence Alaska Medical Center Hospital 24 hour/7 day a week
- (907) 562-2211
- www.providence.org

**The person seeking services is responsible for any financial costs that accrue.*

Appendix G
a priori Codebook

Category	Code	Description/ Justification for Inclusion
Recovery (Research Question 1)		
Recovery	Allegiance to those in recovery An active process or state of being, without a fixed endpoint Abstinence is a prerequisite Addresses shame Cultural Contributing to society Healing from trauma Health/wellness Holistic Improved relationships/social functioning Life skills/self-care Many pathways Meaning-making process toward self-actualization Personal growth Personal recognition of need to change Physical or biomedical functioning Psychiatric and psychological improvements Self-determination Spirituality Self-directed Supported by peers	ASAM, 1982; Dodge et al., 2010; Galanter, 2007; Laudet, 2007, 2008; McLellan et al., 2007; NA, 1988, 1992; SAMHSA, 2012; Sheedy & Whitter, 2009; White, 2007
OBOT Success (Research Question 2 & 4)		
Consumption	Abstinence Reduction in opioid-use Reduction in the use of AOD	Merges "chemical dependency" and "psychiatric" category of Dodge et al., 2010; APA, 2013; Lee & Zerai, 2010

Appendix G Table continued

Functional Factors	Citizenship Criminal activity Employment status and functioning Reduction in other mental health symptoms Stability in one's housing environment	APA, 2013; Butler Center for Research, 2011; Lee & Zerai, 2010; McClellan et al., 2007; SAMHSA, 2004, 2012; White, 2007
Health	Healthcare use patterns HIV risk-taking behavior Improvement in physical health	Butler Center for Research, 2011; Dodge et al., 2010; McLellan, et al., 2007; SAMHSA, 2012; White, 2007
Psychological Health	Cognitive impairment Mental health Psychological adjustment Stress, Coping, and emotional volatility Self-efficacy	Dodge et al., 2010; McLellan, et al., 2007; SAMHSA, 2012; White, 2007; Reilly et al., 1995
Psychosocial and Family Functioning	Community engagement and connectedness Relationship with significant others Social functioning Social interactions Social pressures	Dodge et al., 2010; SAMHSA, 2012; Lee & Zerai, 2010; McLellan et al., 2007; SAMHSA, 2004; Tiffany et al., 2012; White, 2007
Other Addiction and Opioid-Specific Factors	Coping skills Cravings Other addictive behavior (e.g., drug seeking) Drug consumption and intoxication Pain Poor response to medication Addiction and problematic medication use Enhancement expectancies Relapse	Ashrafioun et al., 2015; Darke et al., 1992; Jones et al., 2014; Tiffany et al., 2012

Appendix G Table continued		
Quality of Life*	Safety and security Relationships Health Connectedness with the community Spirituality (connectedness with higher power) Self-esteem Sense of meaning Creativity Reappraisal of goals	Butler Center for Research, 2011; Cummins et al., 2003; Laudet, 2007; Laudet et al., 2009; Lee & Zerai, 2010; Miller & Miller, 2009; NA, 1988; SAMHSA, 2012; Tiffany et al., 2012; Wasserman et al., 2006; White, 2007
Process Factors Before Treatment	Access to treatment Demarginalization Identification Initiation	Lee & Zerai, 2010; McClellan et al., 2007; Reisnger et al., 2003
Process Factors in Treatment	"Any positive change" Fit between patient and treatment Navigation of treatment Patient satisfaction "Planting a seed" Quality of services Therapeutic relationship Treatment compliance Treatment engagement Treatment retention	Amato et al., 2011; Connors et al., 1997; Lee & Zerai, 2010; Luborsky et al., 1997; McLellean et al., 2007; Mee-lee et al., 2010; Orlinsky et al., 1994; Reisinger et al., 2003; SAMHSA, 2004
Facilitators and Barriers (Research Question 3)		
Facilitators & Barriers	Beliefs about treatment Craving Motivation & Self-efficacy Pain Physical and psychological functioning Social support Stress Substance use expectancies Suboxone®	Ashrafioun et al., 2015; Miller & Carroll, 2006; Hyman et al., 2009; Ilgen et al., 2005; Jaremko et al., 2015; Jones et al., 2014; Reilly et al., 1995; Sinha et al., 2007; Tiffany et al., 2012; Tsui et al., 2014; Tonigan, 2004; Redden et al., 2013

Appendix G Table continued		
Barriers	Financial	Hewell et al., 2016a; Redden et al., 2013
	Not ready to stop using	
	Did not know where to go for treatment	
	Transportation	
	Might have negative impact on job	
	Could handle problem w/o treatment	
	Didn't need treatment	
	Time	
	Access to treatment/availability	
	Health literacy	
	Stigma	
	Structural and systemic	
	Suboxone®	

Note. Table was established by the literature reviewed in chapter 2. This a priori codebook consists of categories and codes that facilitated constant compassion with the analysis process.

Appendix H
Institutional Review Board Approval Letter

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uaf-irb@alaska.edu
www.uaf.edu/irb

Institutional Review Board

909 N Koyukuk Dr. Suite 212, P.O. Box 757270, Fairbanks, Alaska 99775-7270

May 29, 2015

To:	Ellen Lopez, PhD Principal Investigator
From:	University of Alaska Fairbanks IRB
Re:	[738121-3] Exploring Success in Buprenorphine Treatment

Thank you for submitting the Amendment/Modification referenced below. The submission was handled by Expedited Review under the requirements of 45 CFR 46.110, which identifies the categories of research eligible for expedited review.

Title:	Exploring Success in Buprenorphine Treatment
Received:	May 23, 2015
Expedited Category:	7
Action:	APPROVED
Effective Date:	May 29, 2015
Expiration Date:	April 30, 2016

Required Information:

The reviewer congratulates the research team on succesfully obtaining external funding for this important project. After careful review of all the materials submitted via IRBnet the reviewer finds that all the necessary modifications have been satisfactorily made to reflect and acknowledge this funding. As well, the additional review and revision of the interview questions sharpens the focus of the inquiry and strengthens the research considerably. The modifications are approved.

This action is included on the June 3, 2015 IRB Agenda.

No changes may be made to this project without the prior review and approval of the IRB. This includes, but is not limited to, changes in research scope, research tools, consent documents, personnel, or record storage location.

Appendix I
Informed Consent Forms

Informed Consent Form
Success in Buprenorphine Treatment: Group Discussion

IRB # 738121-3
Date Approved: 5/29/2015

What is the purpose of this study?

The purpose of this study is to better understand success in Buprenorphine treatment from the point of view of people going through treatment.

We are asking you to take part in this *group discussion* because you are in the Buprenorphine treatment program at Sunshine Community Health Center. If this sounds like you, please read this form carefully. We encourage you to ask questions before you decide if you would like to participate.

What does the study involve?

This study involves sharing your opinion during a two-hour small group discussion. We would like you to share how you view success in Buprenorphine treatment. How much you share is up to you.

What you say is important! We will audio record the group discussion to make sure we capture what you share.

What are the risks and benefits of being in the study?

We cannot say that you will directly benefit from this study. You may appreciate sharing your story and knowing what you share may help others to better understand treatment success.

Remember, you can choose what and how much you share. At times, you may feel uncomfortable sharing your story or hearing the stories of group members. If you ever feel too uncomfortable, please let the researchers know. You can take a break or stop the discussion at any time. We will discuss how it was to participate at the end of the group.

Will I get anything from participating?

We value your time and willingness to share your story. We will offer light refreshments during the group discussion. We will also offer you $20 Fred Meyer gift card.

> ***Please note***: If you choose to leave the group early, we will not be able to offer you the Fred Meyer gift card. Also, Sunshine Community Health Center and the University of

Alaska Fairbanks are not responsible for any financial costs related to seeking additional medication or mental health services.

Will my story be private?

We value your confidentiality and privacy. Researchers will remove any information that may identify you (such as names or places) when we take notes. We will securely store research records and securely dispose of paperwork.

> ***Please note:*** The researchers are required to report serious risk of danger to group members or other people, especially children or elderly. ***Please know*** that researchers will keep all other information, including illegal activity and drug use, confidential.

We ask that you respect the privacy of other group members. We cannot guarantee group members will keep your privacy. However, we will come up with ground rules at the beginning of the discussion to encourage respect to group members' privacy.

We may use the study results in reports, publications, presentations, and to inform future research. All findings from this project will be reported on a group basis. Your name and other information that could identify you will never be connected with any information we report.

Are there others ways I can participate in this study?

Yes! There are two other ways you can participate. First, we will conduct phone interviews to get an in-depth understanding of success in Buprenorphine treatment. Second, we want to make sure we accurately tell your story. Before we report findings, we will have a *Findings Forum* where we will give participants another chance to verify findings. If you are interested in participating in either one of these, please initial and provide your contact information on the next page.

Do I have to participate?

You do not have to participate in this group discussion. You may choose to stop the group discussion at any time for any reason. *Whether or not you take part will not affect your ability to get services from Sunshine Community Health Center.*

Who can I contact if I have questions?

If you have questions, feel free to ask the researchers now or anytime during the group discussion. If you have questions later, you may contact (Principal Investigator) Valerie Hewell at vmhewell@alaska.edu or (907) 474-7007.
If you have questions or concerns about your rights as a participant, you can contact the UAF Office of Research Integrity at 474-7800 (Fairbanks area) or 1-866-876-7800 (toll-free outside the Fairbanks area) or fyirb@uaf.edu.

Statement of Consent:

I understand this study and the procedures described above. By signing my name below, I agree that my questions have been answered, and I agree to participate in this study. I also agree that I am 18 years or older and have been provided a copy of this informed consent form.

Please initial for all that apply:

Required:

___ I agree to participate in the study

___ I understand that the group discussion will be audio-recorded

Optional:

___I consent to being contacted to participate in a follow-up phone interview

___ I would like to be invited to the Findings Forum

___I would like to be contacted about future research related to Buprenorphine treatment

_____ _____

Signature of Participant & Date Signature of Researcher & Date

_____ _____

Contact Information (Phone) Contact Information (Email)

Informed Consent
Success in Buprenorphine Treatment: Phone Interview Script

IRB #738121-3
Date Approved: 5/29/2015

Thank you for showing interest in doing this phone interview! I imagine you have a few questions about the study. I will answer some questions now. I encourage you to ask other questions before you decide if you would like to participate.

Before we begin, I would like to let you know that this phone conversation is being recorded. Is this alright with you?"

You may be wondering about the purpose of this study.

The purpose of this study is to better understand success in Buprenorphine treatment from the point of view of people going through treatment.

I am asking you to take part in this *phone interview* because I heard you are in the Buprenorphine treatment program at Sunshine Community Health Center. Is this correct? *If yes: Great! Let's continue.*
If no: Thank you for showing interest in our study. Unfortunately, you are no longer eligible.

You may be wondering what this study involves.

This study involves sharing your opinion during a one-hour phone interview. We would like you to share how you view success in Buprenorphine treatment. How much you share is up to you.

What you say is important! We will audio record and type-up the phone interview to make sure we understand what you share.

What are the risks and benefits of being in the study?

I cannot say that you will directly benefit from this study. You may appreciate sharing your story and knowing that what you share will help others to better understand treatment success.

Remember, you can choose what and how much you would like to share. At times, you may feel uncomfortable sharing your story. If you ever feel too uncomfortable, please let me know. You can take a break or stop the interview at any time. We will discuss how it was to participate at the end of the interview.

You also may want to know if you will get anything from participating.

We value your time and willingness to share your story. If you complete a phone interview, we will offer you a $20 gift certificate to Fred Meyer. You can pick this up with Cici after the completion of this phone interview. Sunshine Community Health Center and the University of

Alaska Fairbanks are not responsible for any financial costs related to seeking additional medication or mental health services.

It is important to know about your privacy.

We value your confidentiality and privacy. Research team members will remove any information that may identify you (such as names or places) when typing-up the audio recording. We will securely store research records and securely dispose of paperwork.

Please note: I am required to report serious risk of danger to participants or others, especially children or elderly. But please know that all researchers will keep all other information, including illegal activity and drug use, confidential.

We may use the study results in reports, publications, presentations, and to inform future research. All findings from this project will be reported on a group basis. Your name and other information that could identify you will never be connected with any information we report.

We want to make sure we accurately tell your story.

Before we report the findings, we will have a *Findings Forum* where we will give participants another chance to verify our findings. If you are interested in participating, please initial and provide your contact information on the next page.

You do not have to participate in this interview.

You may choose to stop the interview at any time for any reason. *Whether or not you take part will not affect your ability to get services from Sunshine Community Health Center.*

Finally, I want to give you some contact information in case you have questions.

If you have questions, feel free to ask me now or anytime throughout the interview. If you have questions later, you may contact (Principal Investigator) Valerie Hewell at vmhewell@alaska.edu or (907) 474-7007.

If you have questions or concerns about your rights as a participant, you can contact the UAF Office of Research Integrity at 474-7800 (Fairbanks area) or 1-866-876-7800 (toll-free outside the Fairbanks area) or uaf-irb@alaska.edu.

Statement of Consent:

We will now ask for your verbal consent:
(All answers require a response of "yes")

- ❒ Do you understand this study and the procedures described above?
- ❒ Have all of your questions been answered?
- ❒ Have you received a copy of this informed consent form?
- ❒ Are you 18 years or older?

- ❒ Do you agree to participate?
- ❒ Do you understand that this interview will be audio-recorded and transcribed?

We would also like to know if you are interested in participating in future research:

- ❒ Would you like to be contacted to participate in another follow-up phone interview?
- ❒ Would you like to be invited to the Findings Forum?
- ❒ Would you like to be contacted about future research related to Buprenorphine treatment?

Contact information:

Phone number:
Email address:

Appendix J
Focus Group Recruitment Flyer

Appendix K
Alaska Mental Health Trust Authority Funding Agreement
(first two pages)

Trust
Alaska Mental Health Trust Authority

FY15 Authority Grant Funding Agreement
Project Title: Partnership: Exploring Success in Suboxone Treatment (FY15)
Total: $2,000.00
Term: 5/21/2015 - 6/30/2016
Authority Grant Type: Partnership
GIFTS ID: 6604 (Please use this number in all grant correspondence)

Alaska Mental Health Trust Authority 3745 Community Park Loop, Suite 200 Anchorage, AK 99508 Phone: 269-7960 Fax: 269-7966 www.mhtrust.org **Trust Program Contact: Michael R. Baldwin**	**Agency Contact:** **Title:** **Organization Name:** **Address:** **Phone:**	Valerie Hewell PhD student in clinical psychology Sunshine Community Health Center Inc HC 89 Box 8190 Talkeetna, Alaska 99676 (907) 733-9229

I. General Agreement

The purpose of this agreement is to provide **Sunshine Community Health Center Inc** with **$2,000.00** from the Alaska Mental Health Trust Authority (the Trust) for the **Partnership: Exploring Success in Suboxone Treatment (FY15).**

Sunshine Community Health Center Inc and the Trust, in consideration of the funding of this project, establish the following agreed upon conditions.

II. Project Description

This qualitative design study will use community-based participatory research principles to explore how suboxone patients define suboxone treatment success, and to understand how these patients believe suboxone treatment success should be measured. It intends to involve beneficiaries as partners in the study with the understanding that they are experts on their own treatment success. It also intends to inform treatment providers, researchers, evaluators, and other beneficiaries about what factors are involved in suboxone treatment success. This aims to improve the way suboxone treatment is delivered and evaluated with an emphasis on the beneficiaries needs.

Sunshine Community Health Center Inc will negotiate and monitor contracts for the project. Invoices from contractors are to be submitted to **Sunshine Community Health Center Inc** for payment by **Sunshine Community Health Center Inc**.

III. Project Performance Measures

The grantee will submit a final project report that provides:

- A copy of the final research report that includes a summary of findings, implications and recommendations for policy and systems changes to improve the quality of treatment and life for Trust beneficiaries impacted by opioid dependence.
- A presentation of the study results and recommendations to the Alaska Mental Health Trust Authorities Board of Trustees Planning Committee within six months of project completion if scheduling permits.

- A final copy of any presentations or articles that result from professional presentation or publication of data and results from this project.
- Documentation that the Alaska Mental Health Trust Authority is acknowledged as a funder on any professional publication or presentation of the project results.

IV. Budget Agreement

The Trust agrees to fund **Sunshine Community Health Center Inc** in the amount of **$2,000.00** with the understanding that funding is as outlined below:

Project Budget	
Personnel Services	**$800.00**
Travel	**$200.00**
Equipment	**$100.00**
Supplies	**$300.00**
Other	**$600.00**
Grant Total for FY15	**$2,000.00**

It is understood that the Trust cannot advance funds or reimburse **Sunshine Community Health Center Inc** for any anticipated or actual expenditures that has not been documented and agreed to pursuant to this agreement.

V. Payment Provisions

Grant funds will be advanced upon the Trust's receipt of the signed Grant Agreement and the signed Request for Advance form. Billings for the first year are not to exceed **$2,000.00**.

Estimates, contracts, or receipts and other required information will be submitted to:
Lucas Lind, Grants Administrator
Alaska Mental Health Trust Authority
3745 Community Park Loop, Suite 200
Anchorage, AK 99508

VI. Reporting Requirements

Program and Fiscal Reports:
Sunshine Community Health Center Inc will submit to the Trust, program and fiscal information as determined in this agreement.

A comprehensive final grant report will be due within **60** days of the conclusion of the project, **on or before August 31, 2016**.

All grant reports are to be submitted online through **IGAM**, the Trust's online grant reporting application/reporting system. This report can be found at the Trust's website, www.mhtrust.org, in the grant opportunities section. The address for the online report is:

https://www.grantrequest.com/SID_259/Default.asp?CT=CT&SA=AM&FID=&SESID=21953&RL=

The link to online reports can also be found at the Trust's grant opportunities webpage:
http://www.mhtrust.org/index.cfm?section=Trust-Funding&page=Grant-Opportunities

Please contact **Carrie Predeger**, Grants Accountability Manager (907-269-7965) with any questions about

Appendix L
Analysis Tables

Table 4.K-1
All-on-the-wall Themes and Concepts

Theme	Concepts (Sticky notes)
Family/	Family—being with, having the respect of, having close relationships, etc (7)
Close	Being a parent (3) or grandparent (1)
Relationships	Being a spouse (2)
	Having better relationships (kids, family, God)
Friends	Friends—can make it easier, or harder (2)
	Strangers—make it harder (1)
Mental Health	Psychosocial Treatment Group (4)
	Counseling (2)
Stability/	Being able to function in society (2)
Functioning/	To live normal (1)
Functioning & Life	No shame (1)
	Hard to balance life, kids, and do everything expected in group (1)
"Bettering	College/school (1)
Yourself"	Hard to balance work [with life tasks] (1)
	Job—enjoying job, getting promotion/good job (3)
Emotional/Spiritual	Happiness—for no reason, happier than before (2)
	Feeling more spiritually connected (1)
"Doing it for	Discussed as an overarching theme. When the tree model emerged, this was
Myself"	discussed as the trunk
"Termites" of Tree	Felt lame (1)
	Physical dependence on Suboxone® (4)
Unnamed	I don't have to go to the doctors and get med pain pills. (line separating this
	and): and lie to doctors (potentially moral?)
	Take better care of myself i.e. woman's health, dentist, mental, all of above
	Having better healthy lifestyle

Note. This table details the themes and concepts participants developed using the All-on-the-wall procedure. Concepts (right column) represent the sticky notes participants wrote, while themes (left column) represent how the group organized these concepts through discussion. Numbers in the Concepts column represent the number of sticky notes that mentioned the corresponding concept.

Table 4.K-2

Comparison between Final Analysis and Focus Group Themes

Final Analysis Theme	FG Theme	Focus Group Description
Success		
Lifestyle	Functioning	-Can be past, present, or future
Functional Lifestyle		-Not taking from society/giving back to society
		-Being able to do routine daily activities (e.g., employment, school, take care of kids), vacation, and dealing with challenges
Functional Lifestyle	Normalcy	-Normalcy is how they feel about their ability to be in the world, whereas functioning is the "output" or result of this
		-"Clear-headed"
		-"Acceptable life"
Functional Lifestyle	Physical health	-Effects on physical health
Cessation of SUD Symptoms	Cessation of "addict" behavior	-No more lying/stealing/chasing to get drugs
		-Less relapse
		-Less quantity of drug use (e.g., not using 70+pills)
Accomplishing	Psychological wellbeing	-Emotional wellbeing, feeling happy for no reason, improved self-esteem, coping, less social fear, and self-efficacy
Self-Efficacy		
Psychological		-Getting off antidepressants
Emotional Wellbeing		-Attitude or belief that you can be successful, rather than the actually doing it (which is the code "Doing it for yourself")
Mental Health		
		-"I like that I'm able to go into public. Before I feared going into public because I was always using, so I never went into public."
		-"I will get there eventually"
Relationships	Family	-Relational
Family		-Role you play in family
		-To be part of the family (participate, engage, build relationships)
		-"Getting to be a wife and a mother again"

Table 4.K-2 continued

Final Analysis Theme	FG Theme	Focus Group Description
Social Functioning	Social Relationships	-Any reference where participants discuss their relation to people outside of their family (e.g., work, school, friends, and people in group when they're referred to as "friends") -Can include positive or negative impacts on relationships "My relationship with friends is better" -"I've lost relationships again"
Psychological	Morality	-Moral behavior (not lying, stealing)
Character		-Innate moral compass (sense of morality)
Facilitators/Barriers		
Treatment	Counseling/	-Encouragement, accountability, honesty, support,
Psychosocial	Treatment:	problem-solving, sharing ideas, goal-setting, & help;-
Treatment	current	Coping -Being accepted and valued, having friendship, increasing motivation -vital and "key" to success
Psychosocial	Other	-Participants discuss prior encounters with substance abuse
Treatment	Treatment	treatment or NA—could be positive or negative
Psychosocial	Structure of	-Process and policies in place in treatment setting
Treatment	treatment	-Can be positive (not "another drug dealer"; taking the time to talk; listening) or negative (struggle balancing treatment with life; "bringing down the hammer") -"See that's something I really struggle with. Being told choose your job or your treatment, and without that job I can't have treatment" -"And it's sad how many of those people don't even want to be there that are taking up space for other people."
Availability/	Access to	-No access to quality treatment; waitlists; expense
accessibility	treatment	-Unmet need for treatment
Suboxone®	Personal beliefs about being on Suboxone®	-Accepting oneself for being in Suboxone® treatment, or being conflicted/guilty about being on Suboxone® -Some people may be maintained on Suboxone® -Stigma-induced sense that you're "Trading one drug for another"; Beliefs that there needs to be psychosocial component for medication-assisted treatment (MAT)

Table 4.K-2 continued

Final Analysis Theme	FG Theme	Focus Group Description
Suboxone®	Benefits of Suboxone®	-Any reference to benefits of Suboxone®
(Frequently overlaps with) Suboxone®	Gratitude for treatment	-Strong sense of appreciation for treatment; discuss treatment as pivotal -"If it weren't for this treatment, I'd be dead" -"We're just really lucky to have this"
Contextual factors	Stigma	-Judgment for being on Suboxone®
External Assumptions		-Negative attitudes or beliefs about Suboxone® -Desire to address misconceptions to decrease stigma in others "Maybe getting them to really realize what it is, and that it's different. I don't know, it made me feel kind of good. To make them be not so stigmatic about it for lack of a better word."
External assumptions	Provider awareness of Suboxone®	-Discusses awareness, or lack of awareness, that providers and pharmacists have
Psychological factors	Psychological distress	-Guilt/Doubt/Shame
Self-concept and feelings		-Not wanting to be on Suboxone® -Shameful to get treatment -Feeling like a loser; low Self-esteem/ self-worth; not feeling worthy to be in treatment -Fearful that others will find out about treatment and judge -"Yeah, and I've always worried about my family's judgment and whatever, and it took me a long time to just not worry and just do me and what's good for me and my daughters."
Addiction Mindset	Denial	-Avoidance of reality; specifically apples to addiction
	Realization	-Personal awareness of problem/addiction; hitting rock bottom -Facing what you've denied -"Admitting it is half the battle"

Table 4.K-2 continued

Final Analysis Theme	FG Theme	Focus Group Description
Recovery		
Recovery Attitude	Decision/ Desire	-The personal choice the participants makes or has made concerning their treatment, life, and/or recovery -Mediator between self-efficacy (the belief you can) and actually doing it (whether for yourself or others) - Intention/desire to get "clean" -Can be intrinsic motivation or court-ordered, for family, or for God -"Recovery starts when you decide to be healthy" -"But it was my desire to please God that gave me the desire
Healing/Growth	Healing	-Whereas success is being clean, recovery is healing -Holistic process; refers to mending/healing relationships ; "Chain reaction of positive" -"Recovery is a mental, physical, spiritual part of you that all comes in and somewhat works together."
Healing/Growth	Recovery is more than sobriety	-Notion that there is more involved in "recovery" than quitting the substance -In contrast to a "Dry drunk"
Healing/Growth and Success: Accomplishing *Progress*	Growth/ progress	-Constant process of improving self involves improvements made from past until now and also goals/ideas about how they might improve themselves in the future -Reappraisal of goals; self-actualization
Participants Reactions	Hopes for the research	-Participants discuss their hopes for the research
Not Applicable (NA)	Powerful quotes	-Heart-felt moments
NA—Incorporated in Different Themes/Concepts	Spirituality	-Any reference to spirituality/religion (May overlap with personal growth)
NA—Incorporated in Different Themes/Concepts	Addiction prior to treatment	-Discuss what life was like when using (e.g., lying to doctors) -"I was just a warm body in case there was a fire"

Table 4.K-2 continued

Final Analysis Theme	FG Theme	Focus Group Description
NA—Incorporated in Different Themes/Concepts	Challenge/ Struggle	-Any difficulties described by participants in all aspects of recovery, treatment, addiction, and life

Note. This table includes a comparison of the final analysis themes (first column) to the initial focus group codebook with open codes (second column), and definitions and examples (third column). Categories (bolded), themes (underlined), and concepts (italicized) are represented in the first column.

Table 4.K-3
Actual versus Predicted Themes

Actual Themes and Categories that Emerged from Participants	Predicted Themes Based on the Literature
Success	
Lifestyle	
Cessation of SUD Symptoms	-Consumption: Abstinence, reduction in opioid-use, reduction in the use of AOD -Addiction and opioid-specific factors: Coping skills, cravings, other addictive behavior (e.g., drug seeking), drug consumption and intoxication, pain*, poor response to medication, addiction and problematic medication use, enhancement expectancies, relapse
Functional Lifestyle	-Functional Factors: Citizenship, criminal activity, Employment status and functioning, reduction in other mental health symptoms, stability in one's housing environment -Health: Healthcare use patterns, HIV risk-taking behavior, improvement in physical health
Living Life	-Quality of life: Safety and security, relationships, health, connectedness with community, spirituality (connectedness with higher power), sense of meaning, creativity
Accomplishment	
Progress	-Quality of life: reappraisal of goals
Self-Efficacy	-Psychological health: self-efficacy
Relationships	
Family	-Psychosocial and family functioning: relationship with significant others
Social Functioning	-Psychosocial and family functioning: Community engagement and connectedness, social functioning, social interactions, social pressures
Restoring Relationships	*(No predicted theme)*
Psychological	
Emotional Wellbeing	-Psychological Health: Psychological adjustment, Stress, Coping, and emotional volatility
Mental Health	-Psychological Health: Cognitive impairment, Mental health
Character	-Quality of life: self-esteem

Table 4.K-3 continued

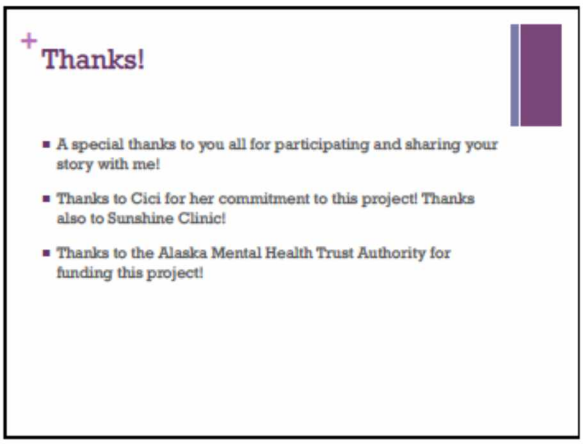
Actual Themes and Categories that Emerged from Participants	Predicted Themes Based on the Literature
Recovery	
Healing/Growth	Addresses shame/discrimination*
	Contributing to society
	Cultural; Supported by peers; Rebuilding community
	Healing from trauma
	Health/wellness
	Improved relationships/social functioning
	Life skills/self-care
	Meaning-making process toward self actualization
	Personal growth
	Psychiatric and psychological improvements
	Spirituality
Process	An active process or state of being, without a fixed endpoint
	Many pathways
	Holistic
Recovery Attitude	Hope and gratitude
	Personal recognition/decision to change
	Self-determination
	Self-directed
(No Actual Theme)	Allegiance to those in recovery
	Abstinence is a prerequisite (*for some)
	Physical or biomedical functioning*
Facilitators and Barriers	
Treatment factors	-Process factors in treatment: "Any positive change", fit between
Psychosocial Treatment	patient and treatment, navigation of treatment, patient satisfaction*,
	"Planting a seed"*, quality of services, therapeutic relationship,
	treatment compliance, treatment engagement, treatment retention*
	Beliefs about treatment; Could handle problem without treatment*;
	Didn't need treatment*
	Time

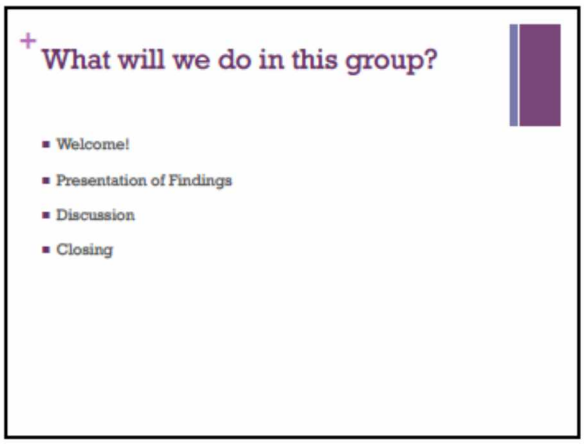
Table 4.K-3 continued

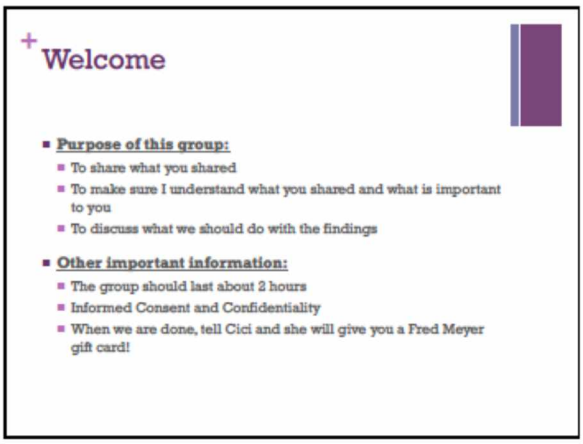
Actual Themes and Categories that Emerged from Participants	Predicted Themes Based on the Literature
Suboxone®	Suboxone®
Availability/Accessibility	Process factors before treatment: Access to treatment,
	demarginalization, identification, initiation*
	Access to treatment/availability
	Did not know where to go for treatment
	Financial
Psychological factors	Motivation
Mindset	Readiness to change
	Self-efficacy
	Psychological functioning
Self-concept and Feelings	Stress
Addiction	Cravings
	Substance use expectancies
Contextual Factors	
Social Relationships	Social support
Life	Transportation
	Might have negative impact on job*
External Assumptions	Health literacy
	Stigma
	Structural and systemic
Other Themes that do not	Pain*
Correspond with Findings	Physical functioning*

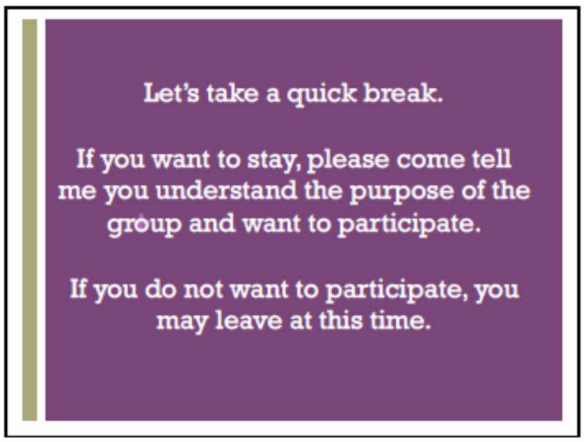
Note. This table includes actual themes emerging from the study findings (first column) compared to predicted themes identified within the literature (second column).
*Themes in the a priori codebook that did not correspond with qualitative themes in this study.

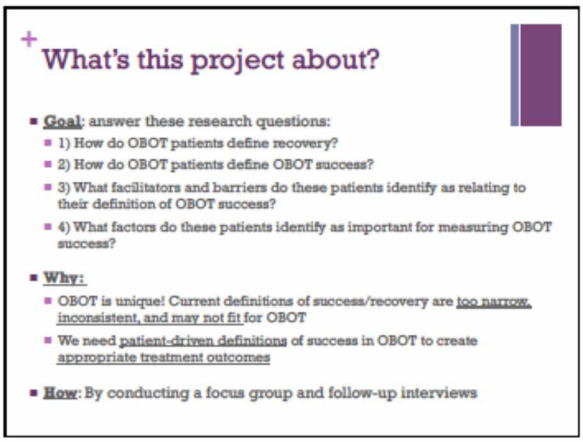
Appendix M
Findings Forum PowerPoint











What I did after conducting the interview/focus group

- Listened to and typed up your interview/focus group
- Read the transcripts, over and over and over!!!
- Looked for things that were common and not so common

About the folks that participated:

Age	
Average	39
Range	22-72
Median	36

Race/Ethnicity	
Caucasian	100%
Russian	8%

Gender	
Male	58%
Female	42%

Treatment Group	
Beginner	42%
Advanced	50%
Individual	8%

Began using opioids...	
Prescribed by doctor	83%
Fun/enhance mood	75%
To get "high"	75%
To escape something negative	58%
To cope with psychological issue	50%
To cope with stress	67%
To manage pain	75%
Because they were available	50%
To fit in	33%
Other: to cope with certain social encounters	8%

Addiction:	
In active addiction	0%
Experienced withdrawal	100%
Consider themselves in recovery	100%

Average time in...	
Active Addiction	9 years (2-20 year range)
Recovery	38.25 months (2 months-9 years)

About the folks that participated:

Living	
Urban	3 (25%)
Rural	5 (42%)
Remote	2 (17%)
Urban & Rural	2 (17)

Living	
spouse/partner	5 (42%1)
With children	3 (25%)
With parents	3 (25%)
Roommate/ moves around a lot	2 (16%)

Living Table 2	
Urban	3 (25%)
Rural/Remote	7 (58%)
Urban & Rural	2 (17%)

Children?	
Yes	7 (58%)
No	5 (42%)

About the folks that participated (current health):

Current Health Concerns	
Arthritis	2
Breathing	4
Chronic pain	4
Heart health	1
Infectious disease	1
Liver/kidney	2
None	4
Abscesses/collapsed veins	2
Other (high blood pressure & smoking)	2

Current Psychological Concerns	
Depression	4
Stress	4
Anxiety	4
None	4

Questions: Defining Success & Recovery

- 1) How do you define success in Buprenorphine treatment? What does that mean to you?
- 2) How do you define "recovery?"
- 3) How does your definition of treatment success relate to, or differ from, your definition of recovery?
- 4) How did you come to define success and recovery like this?

Questions: Elements of Success and Recovery

- 5) Think about yourself in Suboxone treatment. There may have been times that you felt successful, and there may have been other times that you did not feel successful. What contributes to feeling successful, or not feeling successful, in treatment?
- 6) What makes it easier or harder for you to achieve success?

Questions: Measuring Success

- 7) How do we know when there has been success? What should counselors and researchers ask about when they want to know if you have been successful in treatment? What should we be asking to assess or measure if you have been successful?

Questions: Debriefing

- 1) Compared to when you arrived, do you feel better, the same, or worse?
- 2) How would you describe your experience during the interview overall?
- 3) Is there anything else you would like to share or feel I should know before you leave?

Now, let's look at what you said!

What is Success in Suboxone treatment?

- Spiritual/Psychological
  - Emotional wellbeing, mental health, spirituality, clear-headed, character
- Connection
  - Family, social relationships, healing lost relationships
- Lifestyle
  - Functioning/normal life, healthy lifestyle, employment/job/school, money
- Treatment
  - Treatment/counseling, Suboxone, cessation of SUD symptoms, abstinence vs not
- Growth
  - Self-efficacy, progress, hope for future, grateful, transformation, living life

Spiritual/Psychological	
Emotional wellbeing	"Feeling happy for no reason, nothing major has to happen, I'm just generally happy now, where I was miserable before." -6
Mental health	"I'm off antidepressants" -4
Spirituality	"I feel more spiritually connected" -6
Clear-headed	"My mind is a lot more clear. I think more positively." -11
Character	"I feel like a whole new person" -4 "Before, I didn't want to share. I hid everything." -4

Connection	
Family	"Okay. Just having better relationships in general. #1 My kids, my family, gaining all that trust back and everything really started with group and being on Suboxone and being in recover y. relationships & family" -2
Social Relationships/ Functioning	"My relationships with my friends are better." -1
Healing lost Connections	"So I'm making connections that I've lost and that feels pretty damn good." -4

Lifestyle	
Functioning/normal life	"…things like going to work and keeping a regular schedule and paying bills. Maintaining a safe place to stay. Being able to keep possessions that are necessary to maintain a lifestyle, like a car or work equipment…and sustainable lifestyle."-9
Healthy lifestyle	"A healthier lifestyle. All that stuff like going to the doctor and taking care of yourself and going to the dentist. You know the little things that I probably slacked off on when I was getting high and not taking care of myself." -2
Employment/job/ school	And I'm more on top of jobs. I mean with this job, I'm a (promotion). If I was using, I wouldn't even have a job. -6
Money	"you're bettering yourself by having money to take care of things." -3

Treatment	
Cessation of substance use disorder symptoms	"I don't have any cravings or anything." -5 "With Suboxone, you take it and… I'm not always chasing drugs like I was before. That stopped." -3
Suboxone	"If I wasn't on Suboxone, I'd be dead." -3 "If I had to take it the rest of my life, I'd be willing to do it." -6
Treatment/counseling	"treatment does not work as far as quitting unless you want it to work" -12 "a little bit more success to that was being on the OBOT program treatment." -11
Abstinence vs not	"I'd like to be abstinent on my own ability, not on Suboxone." -3 "I wouldn't like to say that I'm not successful because I haven't stopped smoking weed, but I think that I'm successful because I'm not doing heroin." -10

Growth	
Self-efficacy	"Because I'm able to accomplish the things that I want to and direct the course of my life." -9
Progress	"For me, at the beginning, small successes were getting past the point where I actually was able to stop taking something for long enough to take the suboxone." -11
Hope for future	"I have got, I feel like I've got so much more life ahead of me. and right there that's about success for me." -4
Grateful	"I am. I am so…you're going to make me cry…I am so grateful because if I didn't have it, my son would not have a mother anymore. I would be dead." -4
Transformation	"I see it as a life-changing experience . It helps me stay focused on my goals .Ya so it helps…ya my goals and decision-making." -12
Living life	"I'm starting my life and I'm living my life more than I was before." -11

How do you define "recovery"?

"I think it's a chain reaction of positive – it happens in your life because once you start remaining in recovery then your health gets better mentally, physically." -6

- Healing/Growth
- Process
- Desire
- Peace/acceptance/balanced view
- Connection
- Freedom/living life to the fullest

I don't know I guess it was just a series of false starts. It was a few years of falling back into old habits and destroying the progress I had made…You know I got to want it too. Actually want it. (Before), I needed to do these things, but actually wanting to do them…that is what I would term as the recovery phase. I guess you could say I'm still in it." -9

Success vs. Recovery

- **Success can be PART of Recovery:**
  - *"Directly related, but separate" -4*
  - *"Once you have success, you're recovery starts" -3*
  - *"Recovery is not (just) being sober." -6*
  - *"Anybody who's going through recovery is going to succeed in life." -12*
- **Success is the outcome/behavior; Recovery is the process/mindset:**
  - "Recovery is the point where you're getting better…success is more that you're actually doing what you're supposed to do" -11

"Success can be being clean for a day…success is just being on a path to better myself I guess it would be and recovery would be that long-term…you're not going back out there." -10

How did you come to define success and recovery like this?

"You always have an idea in your head of what right and wrong is." -10

- Innate knowledge
- Experience
- External infringement
- Realizing what's right for you

03: Doing it so many times.

04: Step by step.

02: Trial and error.

"It's all about how you feel about yourself. If you feel like you're going in the right direction." -10

What makes it easier or harder for you to achieve success?

Treatment Factors	Treatment, Suboxone, and availability-accessibility of treatment
Internal Factors	Decision-desire-mindset, internalized feelings, self-concept
External Factors	Family-friends, external assumptions, support-connection
Other	Life (AK?)

Easier/Harder: Treatment factors

- Treatment
  - Held accountable, support, acceptance, mattering
  - Mismatch between patient and treatment goals, treatment policy
- Availability-accessibility
  - *"There's never enough room" -3*
  - *"right right to help people out there understand it. Because they really don't. a lot of people I talk to never heard of it, nothing." -4*
- Suboxone
  - *"The Suboxone helps you because it takes away the sickness that makes you want to go back and alleviate the pain." -4*
  - *"Um, the only thing time I have not felt successful in this program is when I was doubting myself for being on Suboxone." -6*
  - *"it allowed me to know that this is attainable. It's like a helper to start with and it helped me get to this point now where I can see that I can do it, or it can be done." -3*

Easier/Harder: Internal Factors

- **Decision-desire-mindset**
  - *It definitely was a struggle. But in the end I just had to put mind over matter and just put my willpower in there." -11*
- **Internalized feelings**
  - *"the only thing I don't like about Suboxone is I have a guilt feeling taking it, and I don't know why." -5*
  - "I am so grateful because if I didn't have it, my son would not have a mother anymore. I would be dead." -4
- **Self-concept**
  - *"you feel like a dirty person when you start, you know what I mean?" -10*
  - "I believe that I do have hope that I can be not dependent on anything." -3

Easier/Harder: External Factors

- **Family-friends**
  - *"We moved out here…because I wanted to get away from all of the people…" -8*
- **External assumptions**
  - *"There's a stigma that's grown on the physicians side of it, the doctors side of it. As they become aware of suboxone; they looked at the notes and see that we were addicts, there's a stigma as far as our character." -3*
- **Support-connection**
  - *"And I definitely have the support of others and that is huge. I guess the biggest would be my wife, but family also. And the treatment. The understanding of (counselor) has been huge. The help of others really helps a lot."-9*

Easier/Harder: Other

- Life
  - *"Like, having a job and being a single mom and going down to (rural AK town) every other week, it doesn't sound like a lot but it was really hard for me to even do the stuff I was supposed to do to even stay in this group." -2*
  - *(discusses changes in living situation):* "So it's been a very different road, it's very nice. I'm very happy where I am in my life right now. I'm happier than I've ever been." -4
- Alaska?
- Time?

A few thing that I was wondering about…

- Is there something about being in Alaska that warrants it's own category? Or could it be considered more of another theme, like "Life":

I think the difference is just the season. I'm going through (Current treatment), it's winter time. And when I was with (past treatment), it was through the summer, starting like in March and to have that all through the summer. So, it's just…there's a lot more things to do in the summer. It helped. I don't' know if it was flip-flopped and I was with (current provider) during the summer and (previous provider) during the winter, it'd probably be the same problem. -12

And especially in Alaska, people get bored and what not. -10

Also…

- Is time a separate factor, or is it included in "life"

I know this isn't really what you're looking for but time. The biggest thing is time. You never have enough time. But it's not really something that I can do anything about. But it's definitely related to the whole situation because I feel like I lost 10, 12 years and I should have maybe been trying to do more to make up for lost time. -9

Measuring Success/ Recovery

How should we measure or assess success?

- Individualized & Flexible Definition
- Recognizing needs/traits of people who are addicted
- Other factors to consider
- Pay attention

"..like the obvious recurring relapse or even worse being arrested, being in jail, being in a house/locked ward treatment program. And those are some of the ways that are kind of obvious but from there, it would have to come with the patient." -9

"There are so many other factors like is your participant being honest. What is your participant's idea of success? Are you deeming success based on the stereotypical societal definition? What kind of success are you looking for? Are you going to base it on whether or not they seem like you? Are you basing it on whether or not they conform to your definition of recovery, because I don't know that that would be the right way to go about it either. -8

Debriefing

Is there anything else you'd like to share?

- Desire to help/make change
- Educate
- Views of treatment/drug use
- Remove stigma
- insight/awareness/gratitude

"don't try to take this medication away from people who are actually trying to change their lives. It works. It really helps. Not for everybody, it might not work for everybody, but I think for the majority of people it does." -12

"So just availability, misunderstanding about how to get into them, or advertising for them. So I definitely see those are some of the main, key issues." -8

How do you feel after participating in the study?

- Positive or hopeful mood
- Sharing
- Desire to change things

"I feel, I feel, it's good to—it's like a therapy session almost… It gets my feeling out into the air to myself. Which it's important to know how you feel and what makes you feel what, so…it's good to do things like this. I'm in a positive mood." -10

"I feel better. I do. I feel better hoping that maybe this can help in some way." -8

In Sum…

- **Success** includes spiritual/psychological components, growth, lifestyle, treatment, and connection
- **Recovery** is more related to the process, and success the outcome; recovery is more long-term, success can be "small successes"
- Primary facilitators/barriers include **treatment factors** (e.g., availability-accessibility, treatment, suboxone), **internal factors** (e.g., self-concept, internalized feelings), **external factors** (e.g., support, family-friends), and life

What do you think? Discussion Questions:

1) What are your **general impressions** of the findings?

2) What was most **interesting**? Did anything **surprise** you?

3) Are there findings you may **not agree** with and would like to **clarify**?

4) Are there findings you **particularly agree with** and would like to **highlight**?

5) How would you like to **use this research**?

6) **How did you feel about the process** of doing this research? If you did the focus group, how did you feel about the sticky-notes?

Closing:

1) How helpful was it to hear other people's stories?

2) How was it to participate in this forum using distance technology?

3) Any final thoughts/reactions?

Thanks again!!